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UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549
APPLICATION FOR, AND AMENDMENTS TO APPLICATION FOR, REGISTRATION AS A NATIONAL SECURITIES EXCHANGE OR EXEMPTION FROM REGISTRATION PURSUANT TO SECTION 5 OF THE EXCHANGE ACT

Date filed (MM/DD/YY); OFFICIAL USE **ONLY**

WARNING: Failure to keep this form current and to file accurate supplementary information on a timely basis, or the failure to

	uld violate the federal securities laws and may result in disciplinary INTENTIONAL MISSTATEMENTS OR OMISSIONS OF FACT	, administrative, or criminal action.
1.	APPLICATION NYSE Area, Inc. State the name of the applicant:	☑ AMENDMENT
2.	Provide the applicant's primary street address (Do not use a	P.O. Box): SEC
	11 Wall Street, New York, NY 10005	Mail Processing
3.	Provide the applicant's mailing address (if different):	Section
Ο.		MAY 23 ZU17
	11 Wall Street, New York, NY 10005	Washington DC
4.	Provide the applicant's business telephone and facsimile no 212-656-2938	440
	(Telephone)	(Facsimile)
5.	Provide the name, title, and telephone number of a contact Martha Redding Assistant Sec	retary 212-656-2938
6.	(Name) (Title) Provide the name and address of counsel for the applicant: Martha Redding	3 3 1
	NYSE Holdings LLC 11 Wall Street, New York, NY 10005	
	December	31
7.	Provide the date applicant's fiscal year ends:	
8.	Indicate legal status of applicant: Corporation Limited Liability Company	☐ Sole Proprietorship ☐ Partnership ☐ Other (specify):
	If other than a sole proprietor, indicate the date and place we where incorporated, place where partnership agreement (a) Date (MM/DD/YY): 12/21/72 (b) State/Count	nt was filed or where applicant entity was formed):
	(c) Statute under which applicant was organized:	aware General Corporation Law
app swo app and	ECUTION: The applicant consents that service of any civil action brough thange Commission in connection with the applicant's activities may be givelicant's contact employee at the main address, or mailing address if different orn, deposes and says that he/she has executed this form on behalf of , and all cant represent that the information and statements contained herein, included in the information and statements contained herein, included the information filed herewith, all of which are made a part hereof, are contained in the information filed herewith.	th by , or notice of any proceeding before, the Securities and ten by registered or certified mail or confirmed telegram to the ent, given in Items 2 and 3. The undersigned, being first duly and with the authority of , said applicant. The undersigned and auding exhibits, schedules, or other documents att ached hereto, current, true, and complete.
Da	Martha I	(Name of applicant) Redding, Assistant Secretary
By: Sul	(Signature) oscribed and swom before me this <u>aand</u> day of <u>MUY</u>	Year) (Printed Name and Title) Aux Mauro (Notary Public)
Му	Commission expires MY 29,2020 County of WETCHESTER	State of New YCK
	This page must always be completed in full with origin	ingle manual cianature and notarization

Affix notary stamp or seal where applicable.

SECURITIES AND EXCHANGE COMMISSION Washington, D.C.

Exhibits Accompanying Amendment
to
FORM 1 REGISTRATION STATEMENT
of
NYSE ARCA, INC.

May 2017

EXHIBIT F

ACCOMPANYING AMENDMENT TO FORM 1 REGISTRATION STATEMENT

OF

NYSE Arca, Inc.

May 2017

A complete set of NYSE Arca, Inc.'s forms pertaining to application for membership, participation, or subscription, and application for approval as a person associated with a member, participant, or subscriber follows.

This information is publicly available on the Exchange's website at www.nyse.com.

NYSE Arca Options

Options Trading Permit Short Form Application

NYSE Arca Short Form OTP Membership Application and Agreement

To qualify for Short Form Options Trading Permit (OTP) Membership on NYSE Arca, the applicant must be an approved NYSE Arca Equities Trading Permit (ETP) Holder. Current ETP Holder applicants are eligible for expedited approval. To apply, please complete and submit this Short Form Application, Membership Agreement, Clearing Letter of Consent, User Agreement, and the Registered Trader and Nominee Application to:

NYSE Arca, Inc.
Attn: Client Relationship Services
Email: crs@nyse.com

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KEY PERSONNEL		
Please identify the key personnel who hold the below positions (or the individual whose responsibilities are the functional equivalent of such position, regardless of actual titles used by the Applicant Firm) and who will want to receive communications pertaining to our options markets.		
Chief Executive Officer ("CEO")		
Name:	CRD:	
Phone:		
Email:		
Chief Financial Officer ("CFO")		
Name:	CRD:	
Phone:		
Email:		
Chief Compliance Officer ("CCO")		
Name:	CRD:	
Phone:		
Email:		
Chief Operations Officer ("COO")		
Name:	CRD:	
Phone:		
Email:		
Head of Options Clearing		
Name:	CRD:	
Phone:		
Email:		
Head of Options Trading		
Name:	CRD:	
Phone:		
Email:		

SECTION 1 – Short Form OTP Membership Application			
Short Form Eligibility:			
Applicant is cur	rently a member in good s	standing of NYSE Arc	a Equities
General Information			
Name of Applicant Broker-Deal	er:		
Business Address:			
City:		State:	Zip Code:
Business Phone:			
Email:			
Web Address, if any:			
CRD Number:			,
NYSE Arca Equities ETP ID:			
Designated Examining Authorit	y:		İ
Contact Information			
Contact Name:		•	
Job Title / Position			
Phone:		Ema	il:
Type of Business to be Cond	ucted With Options Trac	ling Permit (Check a	II that apply)
☐ Lead Market Maker	☐ Remote Market Maker	F	loor Market Maker
☐ Floor Broker	☐ Clearing Services		Order Sending
☐ Agency Trading	☐ Proprietary Trading		way Market Making
All individual applicants mus https://www.nyse.com/publicdocs/r			nee Application available at gistered Trader and Nominee Application.pdf

NYSE Arca OTP Short Form April 2017

SECTION 2 -	Membership	Agreement

Applicant Broker-Dealer agrees to abide by the Bylaws and Rules of NYSE Arca, Inc., as amended from time to time, and all circulars, notices, interpretations, directives or decisions adopted by NYSE Arca, Inc.

Applicant Broker-Dealer authorizes any SRO, commodities exchange, governmental agency or similar entity to furnish to NYSE Arca, upon its request, any information that such person may have concerning the ability, business activities, and reputation of Applicant Broker-Dealer or its associated persons, and releases such person or entity from any and all liability in furnishing such information. Applicant Broker-Dealer authorizes NYSE Arca to make available to any governmental agency, SRO, commodities exchange or similar entity, any information it may have concerning the Applicant Broker-Dealer or its associated persons, and releases NYSE Arca from any and all liability in furnishing such information.

Applicant Broker-Dealer acknowledges its obligation to update any and all information contained in any part of this application, including termination of membership with another SRO, which may cause a change in the Applicant Broker-Dealer's DEA. It is understood that in that event, additional information may be required by NYSE Arca

Applicant Broker-Dealer:	_
Signature of Authorized Officer, Partner, Managing Member or Sole Proprietor:	 Date:
Print Name:	Title:

SECTION 3 – Clearing Letter of Consent		
Notice of Consent – To be completed by Clearing OTP Holder of Application Broker-Dealer		
("NSCC"), the Options Clearing Corporation The undersigned Clearing OTP Holder hereby	ng agency named below, a member of the National Securities Clearing Corporation ("OCC"), and an approved OTP Holder of NYSE Arca, Inc. agrees to accept full financial responsibility for all transactions effected through and Applicant Broker-Dealer with the clearing agency:	
Applicant Broker-Dealer	CRD# and/or SEC File#	
may be relied upon by NYSE Arca, Inc., the	ntee, letter of authorization, or notice of consent pursuant to NYSE Arca Rules and NSCC, the OCC, and their respective members. This Notice of Consent shall be orm time to time, and shall remain in effect until revoked in writing by the Clearing	
Clearing OTP Holder (Broker-Dealer Name)		
Clearing OTP Holder (OCC Clearing #)		
Clearing OTP Holder (NSCC Clearing #)		
Signature of Authorized Officer, Partner or Managing Member of Clearing OTP Holder	Signature of Authorized Officer, Partner or Managing Member, or Sole Proprietor of OTP Holder	
Print Name / Title	Print Name / Title	
Date	Date	

NYSE Arca Equities, Inc.

Equity Trading Permit Application and Contracts

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APPLICATION PROCESS

Filing Requirements

Prior to submitting the <u>Application for Equity Trading Permit ("ETP")</u>, an Applicant Broker-Dealer must file a Uniform Application for Broker-Dealer Registration (Form-BD) with the Securities and Exchange Commission and register with the FINRA Central Registration Depository ("Web CRD®").

Checklist

Applicant Broker-Dealer must complete and submit all applicable materials addressed in the Application Checklist (page 4) to crs@nyse.com.

Note: All application materials sent to NYSE Arca will be reviewed by NYSE Arca's Client Relationship Services ("CRS") Department for completeness. The applications are then submitted to FINRA who performs the application approval recommendation. All applications are deemed confidential and are handled in a secure environment. CRS or FINRA may request applicants to submit documentation in addition to what is listed in the Application Checklist during the application review process, pursuant to NYSE Arca Equities Rule 2.3. If you have questions on completing the application, you may direct them to: Client Relationship Services: Email: crs@nyse.com or (212) 896-2830 option 5.

Application Process

- Following submission of the <u>Application for Equity Trading Permit</u> and supporting documents to NYSE Arca, Inc. ("NYSE Arca"), the application will be reviewed for accuracy and regulatory or other disclosures. NYSE Arca will submit the application to FINRA for review and approval recommendation; NYSE Arca Compliance and Regulation complete the final review and approval.
- If review of Statutory Disqualification Disclosure information and/or a background investigation indicates that the Applicant Broker-Dealer has an associated person(s) with a possible statutory disqualification, NYSE Arca will contact the representative of the Applicant Broker-Dealer to discuss the statutory disqualification process.
- If it appears that the Applicant Broker-Dealer has outstanding debt, civil judgment actions and/or regulatory disciplinary actions, the Applicant Broker-Dealer will be contacted by NYSE Arca for further information.
- Applicants who have completed and returned all documents without indication of a statutory disqualification, outstanding debt, civil judgment actions and/or regulatory disciplinary actions will be presented to NYSE Arca for approval or disapproval without delay.
 - ✓ Applicant Broker-Dealer will be subject to disciplinary action if false or misleading answers are given pursuant to the Application for Equity Trading Permit.
- NYSE Arca does not accept fingerprint cards. Fingerprint cards must be submitted directly to FINRA within 30 days of filing the Form U4. The fingerprint cards must be cleared by the FBI for individuals who seek to register with NYSE Arca or be approved by NYSE Arca. Firms may request FINRA-approved fingerprint cards through the Gateway Call Center at: (301) 590-6500. Fingerprint cards should be sent directly to: For Regular U.S. Mail: FINRA, Registration and Disclosure Department, P.O. Box 9495, Gaithersburg, MD 20898-9495. P.O. Boxes will not accept courier or overnight deliveries. For Express/Overnight Mail Delivery: FINRA, Registration and Disclosure Department, 9509 Key West Avenue, Rockville, MD 20850. If a phone number is required for the recipient, provide: (301) 590-6500. Your firm should receive the FBI search results in the "Fingerprint Status Received from FBI Notice Queue" within three business days after the card is sent to the FBI. Additional information regarding the submission of fingerprints to Web CRD may be obtained on the FINRA Web site: https://firms.finra.org/webcrd.
- NYSE Arca will promptly notify the Applicant Broker-Dealer, in writing, of their Membership decision.

In the event an Applicant Broker-Dealer is disapproved by NYSE Arca, the Applicant Broker-Dealer has an opportunity to be heard upon the specific grounds for the disapproval, in accordance with the provisions of NYSE Arca Rule 10.13. A disapproved applicant desiring to be heard must, within thirty (30) calendar days of the date upon which the Corporation's decision was mailed to the applicant, file a petition in accordance with the provisions of Rule 10.13

ΑP	PLICATION	CHECKLIST & FEES ¹
DO	CUMENTATIO	N CHECKLIST FOR NON-NYSE ARCA DEA BROKER-DEALER APPLICANTS
	Application for	Equity Trading Permit
	0	Sections 1-6, and 8-9 are MANDATORY for all applicants Section 7 if applicant is not self-clearing
	Signed Maste	r User Agreement
	Form BD, incli	uding Schedules & Disclosure Reporting pages must be up to date and accurate on FINRA's WebCRD®
	A Form U-4 ar	nd Fingerprint cards for the following individuals needs to be submitted directly to the FINRA, if not currently available on Web CRD® ²
	0	Direct/Indirect Owners, Allied Persons, and Approved Persons as listed on Form BD Schedules A & B Designated supervisors and principals
	Financial Doc	umentation
	o o o	Four (4) Most Recent FOCUS Reports ³ and the Most Recent Audited Financial Statements, if applicable Most Recent Balance Sheet and Capital Computation Six Month Profit/Loss Projection
	All examinatio	n reports and corresponding responses from the Applicant Broker-Dealer for the last two exam reports
	Organizationa Agreem	Documents: Articles of Incorporation and Bylaws; Partnership Agreement; Limited Liability Company ("LLC") Agreements; Operating ent; or similar documentation
<u> </u>	Copy of Writte	n Supervisory Procedures⁴, Anti-Money Laundering Procedures, and Insider Trading Act Procedures (if separate)
DO	CUMENTATIO	N CHECKLIST FOR NYSE ARCA DEA BROKER-DEALER APPLICANTS
	Application for	Equity Trading Permit
	0	Sections 1-6, and 8-10 are MANDATORY for all applicants Section 7 if applicant is not self-clearing
	Signed Maste	r User Agreement
	Form BD, incl	uding Schedules & Disclosure Reporting pages must be up to date and accurate on FINRA's WebCRD®
	A Form U-4 ar	nd Fingerprint cards for the following individuals needs to be submitted directly to the FINRA, if not currently available on Web CRD®2
	o o o	Direct/Indirect Owners, Allied Persons, and Approved Persons as listed on Form BD Schedules A & B Designated supervisors and principals All Authorized Traders
	NYSE Arca Al informat	P Form to be completed by persons required to be Approved Persons with the Exchange and for whom the required disclosure ion is not available on Web CRD®.
	Financial Doc	umentation
	o o o	Four (4) Most Recent FOCUS Reports ³ and the Most Recent Audited Financial Statements, if applicable Most Recent Balance Sheet and Capital Computation Six Month Profit/Loss Projection Subordination Agreements, if applicable
	Proprietary Ac	counts of Introducing Broker-Dealers (PAIB) Agreements, if applicable
	All examinatio	n reports and corresponding responses from the Applicant Broker-Dealer for the last two exam reports
	Organizationa Agreem	Documents: Articles of Incorporation and Bylaws; Partnership Agreement; Limited Liability Company ("LLC") Agreements; Operating ent; or similar documentation
0	Copy of Writte	n Supervisory Procedures ⁴ , Anti-Money Laundering Procedures, and Insider Trading Act Procedures (if separate)

Note: All ETP Holders are responsible for maintaining a list of all Authorized Traders, and such list must be made available to NYSE Arca upon request as required by NYSE Arca Equities Rule 7.30(a).

arca/NYSE Arca Marketplace Fees.pdf . Additional fees to those listed within this application may apply.

A \$125 Investigation Fee may be required for each Control Person, Allied Person, Approved Person, Designated Supervisor or Authorized Trader (DEA Applicants Only) for

For a list of fees, please review the "Schedule of Fees and Charges for Exchange Services" found at https://www.nyse.com/publicdocs/nyse/markets/nyse-

whom required information is not available on Web CRD®.

3 Applicants must demonstrate that they have current net capital of 140% of their minimum net capital requirement or \$20,000 in excess of their minimum dollar net capital requirement, whichever is greater. If the Broker-Dealer has reported net losses for the period reviewed, the Firm's financial statements must demonstrate that its excess net capital can withstand six (6) consecutive months of average losses. Applicant Broker-Dealers that do not have the requested financial information available are required to submit Pro Forma Financial statements reflecting the Balance Sheet and Profit & Loss Statement detail for each month for the most recent six (6) months or since inception, whichever is less.

Market Maker applicants must include, but are not limited to, the following NYSE Arca Equity Rules: 6.3 (Prevention of the Misuse of Material, Nonpublic Information), 6.17 (Anti-Money Laundering Compliance Program), 6.18 (Supervision), and 7.20 – 7.25 (Market Makers).

EXPLANATION OF TERMS

For purposes of this application, the following terms shall have the following meanings:

Applicant Broker-Dealer - is the Broker-Dealer organization applying for an Equity Trading Permit or amending this form.

Associated Person - a person who is a partner, officer, director, member of a LLC, trustee of a Business Trust, or employee of an ETP Holder or any person directly or indirectly controlling, controlled by or under common control with an ETP Holder.

Authorized Trader – a person who may submit orders to NYSE Arca, LLC's trading facilities on behalf of his or her ETP Holder or Sponsored Participant.

Clearing Services - a Broker-Dealer who receives and executes customers' instructions, prepares trade confirmations, sends the money related to the trades, arranges for the physical movement of securities, and shares responsibility with an introducing broker-dealer for compliance with regulatory requirements.

Control – (as defined on Form-BD) the power, directly or indirectly, to direct the management or policies of a company, whether through ownership of securities, by contract or otherwise. Any person that (1) is a director, general partner or officer exercising executive responsibility (or having similar status or functions); (2) directly or indirectly has the right to vote 25% or more of a class of a voting security or has the power to sell or direct the sale of 25% or more of a class of voting securities; or (3) in the case of a partnership, has the right to receive upon dissolution, or has contributed, 25% or more of the capital, is presumed to control that company.

Central Registration Depository System ("Web CRD®") – A centralized electronic registration system maintained by FINRA which provides information on registered representatives and principals for members of participant organizations. This database contains employment history, exam scores, licensing information, disciplinary actions, fingerprint results, and other related registration information. NYSE Arca, Inc. is a participant of this system.

Designated Examining Authority ("DEA") – the SEC will designate one Self-Regulatory Organization ("SRO") to be a Broker-Dealer's examining authority, when the Broker-Dealer is a Member or ETP Holder of more than one SRO. Every Broker-Dealer is assigned a DEA, who will examine the Broker-Dealer for compliance with financial responsibility rules.

Designated Supervisor – refers to any person that is a partner, director, or officer exercising executive responsibility (or having similar status or functions) for supervising Authorized Trader(s) ("AT") (as defined in NYSE Arca Equities Rule 1.1(g)).

Direct Owners/Executive Officers — Allied Persons and Approved Persons, as those terms are defined by NYSE Arca Equities Rules 1.1(c) and 1.1(d), respectively, and generally refer to (1) a director, general partner or officer exercising executive responsibility (or having similar status or function); or (2) directly or indirectly has the right to vote 5% or more of a class of voting security or has the power to sell or direct the sale of 5% or more of a class of voting securities; (3) is entitled to receive 5% or more of the net profits; (4) in the case of a partnership, all general partners and those limited and special partners that have the right to receive upon dissolution or have contributed, 5% or more of the capital; or (5) in the case of a LLC, those members that have the right to receive upon dissolution, or have contributed, 5% or more of the LLC's capital, and if managed by elected managers, all elected managers.

ETP or ETP Holder— an Equity Trading Permit issued by the Corporation for effecting approved securities transactions on the Corporation's trading facilities. An ETP may be issued to a Sole Proprietor, Partnership, Corporation, LLC or other organization which is a registered Broker or Dealer, pursuant to Section 15 of the Securities Exchange Act of 1934, as amended, and which has been approved by the Corporation.

Financial Arrangement – (1) the direct financing of an ETP Holder's dealings upon the Exchange; (2) any direct equity investment or profit sharing arrangement; or (3) any consideration over the amount of \$5,000.00 including, but not limited to, gifts, loans, annual salaries or bonuses.

Market Maker -is obligated to maintain continuous two-sided Q Orders in those securities in which the Market Maker is registered to trade, pursuant to NYSE Arca Equities Rule 7.23(a).

Market Maker Authorized Trader ("MMAT") – an authorized trader who performs market-making activities pursuant to Rule 7, on behalf of a Market Maker

NYSE Arca, Inc. ("NYSE Arca" or the "Corporation") – a Delaware corporation as described in the Corporation's Certificate of Incorporation and Bylaws. NYSE Arca is a national securities exchange as that term is defined by Section 6 of the Securities Exchange Act of 1934, as amended. NYSE Arca, Inc. is the Self-Regulatory Organization for NYSE Arca, LLC

NYSE Arca, LLC - The equities marketplace and a trading facility of NYSE Arca, Inc.

NYSE Arca Equities - NYSE Arca Equities, Inc. (a wholly owned subsidiary of NYSE Arca, Inc.).

Primary Business – refers to greater than 50% of the ETP Holder's business.

Self-Regulatory Organization ("SRO") - each exchange or national securities association is an SRO. Each SRO must have rules that provide for the expulsion, suspension and other discipline of member Broker-Dealers for violation of the SRO's rules.

NYSE Arca Equities, Inc.

Equity Trading Permit Application and Clearing Letter of Consent

SECTION 1 – ORGANIZATIONAL PROFILE				
Date:		SEC #:	CRD #: _	MPID: (If NASDAQ Participant)
GENERAL	INFORMATION			
Name of App	olicant Broker-Dealer:			
Business Ad	dress:			
	City:	:	St	tate: Zip Code:
Business Ph	one:		Website):
Contact Nam	ne:		Title:	
Phone:			Email:	
TYPE OF C	RGANIZATION			
_ c	Corporation	Limited Liability Company		Partnership Sole Proprietor
TYPE OF E	BUSINESS TO BE CO	ONDUCTED WITH EQUITY TI	RADING F	PERMIT (Check all that apply)
□ M	larket Maker*	☐ Public Customer Business		Clearing Services Proprietary Trading
	Other			
* Please also	complete Application for M	Market Maker Registration		
OTHER BU	ISINESS ACTIVITIES	S CONDUCTED BY APPLICA	NT BROK	KER_DEALER (Check all that apply)
☐ Ir	nvestment Banking	☐ Public Customer Business		Options Market Making
☐ P	roprietary Trading	☐ Other	·	
OTHER SE	LF-REGULATORY	ORGANIZATION MEMBERSH	IPS (Che	ck all that apply)
□ N	IYSE MKT			New York Stock Exchange (NYSE)
□ C	hicago Board Options E	Exchange (CBOE)		Chicago Stock Exchange (CHX)
☐ Ir	nternational Securities E	Exchange (ISE)		Boston Stock Exchange (BSE)
□ F	inancial Industry Regula	atory Authority, Inc. (FINRA)		Nasdaq Stock Market (NQX)
□ P	hiladelphia Stock Excha	ange (PHLX)		BATS (BATS)
☐ In	nvestors' Exchange LLC	C (IEX)		
APPLICAN	T'S DESIGNATED E	EXAMINING AUTHORITY ("DE	EA")	
□N	YSE Arca, Inc. (NYSE A	Arca / NYSE Arca Equities)		Other

SECTION 2 - MEMBERSHIP AGREEMENT	
Applicant Broker-Dealer agrees to abide by the Bylaws and Rules of NYSE Arc circulars, notices, interpretations, directives or decisions adopted by NYSE Arc	
Applicant Broker-Dealer authorizes any SRO, commodities exchange, government upon its request, any information that such person may have concerning the all Broker-Dealer or its associated persons, and releases such person or entity from Applicant Broker-Dealer authorizes NYSE Arca to make available to any gover similar entity, any information it may have concerning the Applicant Broker-Dealer and all liability in furnishing such information.	bility, business activities, and reputation of Applicant om any and all liability in furnishing such information. Inmental agency, SRO, commodities exchange or
Applicant Broker-Dealer acknowledges its obligation to update any and all infoincluding termination of membership with another SRO, which may cause a chunderstood that in that event, additional information may be required by NYSE	ange in the Applicant Broker-Dealer's DEA. It is
Applicant Broker-Dealer	
Signature of Authorized Officer, Partner, Managing Member, or Sole Proprietor	Date
Print Name of Authorized Officer, Partner, Managing Member, or Sole Proprietor	Title

OFOTION A FINANCIAL DIO	NACHDE
SECTION 3 – FINANCIAL DISC FINANCIAL STATEMENT	CLOSURE
Copies of the required fina	incial items as noted on the checklist including: the four (4) most recent FOCUS Reports ⁵ and ements, and all examination reports and corresponding responses.
SOURCE OF CAPITAL	
Explain the source of Applica	ant Broker-Dealer's Capital
PROPRIETARY ACCOUNTS O	F INTRODUCING BROKER-DEALERS (PAIB)
Do you hold a Proprietary Account	as an Introducing Broker-Dealer (PAIB)
Dealer regarding the net capital trea accounts without a PAIB Agreement	er must notify its DEA in writing when it has entered into a PAIB Agreement with a clearing Broker- atment of assets held in proprietary accounts. Assets (cash and securities) held in trading it are considered to be non-allowable in the computation of net capital under SEC Rule 15c3-1. If e enclose a copy of all PAIB Agreements you have entered into with a clearing broker-dealer.
SUBORDINATED LOANS	
Have any subordinated loans been	made to Applicant Broker-Dealer?
FINANCIAL OR CONTROLLIN	CINTEDFOTO
Does the Applicant Broker-Dealer h bond ownership, through outstandir Yes (Explain below)	nave a financial or controlling (as defined in Form-BD) interest (through direct or indirect stock or ing loans, or otherwise) in any organization engaged in a securities, financial or related business? No
FINANCIAL ARRANGEMENT	
Does the Applicant Broker-Dealer h	ave a financial arrangement with any other Broker-Dealer?
Yes (Explain below)	□ No
Type of Arrangement:	☐ Direct Equity Investment ☐ Any consideration over \$5,000 ☐ Profit Sharing ☐ Direct Financing ☐ Other
Terms of Arrangement (include the	names of all participants in the arrangement, and the nature and terms of the arrangement):
OUTSTANDING DEBT (Check	all that apply)
Does the Applicant Broker-Dealer of	we money to any of the following?
☐ Any NYSE Arca member of	or member organization or NYSE Arca ETP Holder
Any other national securities	es or commodities exchange or national securities association
Any member of any other	national securities or commodities exchange or national securities association
Explain to whom the money is owed evidence of an agreement of repays	d and the dollar amount. Attach a copy of arrangements made for repayment of this debt and ment
☐ No. the Applicant Broker-D	Dealer does not owe money to any of the above referenced persons or entities.

Applicant Broker-Dealers that do not have the requested financial information available are required to submit Pro Forma Financial statements for the most recent six (6) months or since inception, whichever is less.
 NYSE Arca ETP Application - March 2017

Please list the following individuals: (A) each Allied Person as defined in NYSE Arca Equities Rule 1.1(c) ⁸ ; (B) each Approved Person as defined in NYSE Arca Equities Rule 1.1(d) ⁷ ; and (C) each Person as defined in NYSE Arca Equities Rule 6.18(b)(2) ⁸ .			
You may submit mu	ultiple copies of this form, if needed, or attact	a copy of Schedule A and S	Schedule B of Form BD.
APPLYING AS:	ALLIED PERSON	APPROVED PERSON	
Name:	Title:	····	CRD#
Firm Name::	Phone:		
	Designated Supervisor of Authorized Traders		
Email:	Form U4 and fingerprint information ⁸ is current	and accessible for this persor	n on Web CRD™
APPLYING AS:	ALLIED PERSON	APPROVED PERSON	
Name:	Title:	···	CRD#
Firm Name::	Phone:		
	Designated Supervisor of Authorized Traders		
Email:	Form U4 and fingerprint information ⁸ is current	and accessible for this persor	n on Web CRD™
APPLYING AS:	ALLIED PERSON	APPROVED PERSON	
Name:	Title:	···	CRD#
Firm Name::	Phone:		
	Designated Supervisor of Authorized Traders		
Email:			
_	Form U4 and fingerprint information ⁸ is curren	t and accessible for this persor	n on Web CRD™
APPLYING AS:	ALLIED PERSON	APPROVED PERSON	
Name:	Title:		CRD#
Firm Name::	Phone:		
	Designated Supervisor of Authorized Traders		
Email:			
	Form U4 and fingerprint information ⁸ is current	t and accessible for this persor	n on Web CRD™

Pursuant to NYSE Arca Equities Rule 1.1(d), the term "Approved Person" shall refer to a person who is not an ETP Holder, nor an employee or an Allied Person of an ETP Holder, and who: (1) is a director of an ETP Holder, or (2) controls an ETP Holder, or (3) beneficially owns, directly or indirectly, 5% or more of the outstanding equity securities of an ETP holder, or (4) has contributed 5% or more of the partnership capital; and who has been approved by the Corporation as an Approved Person.

⁶ Pursuant to NYSE Arca Equities Rule 1.1(c), the term "Allied Person" shall refer to an individual, who is: (1) an employee of an ETP Holder who controls such firm, or (2) an employee of an ETP Holder corporation who is a director or a principal executive officer of such corporation, or (3) an employee of an ETP Holder limited liability company who is a manager or a principal executive officer of such limited liability company, or (4) a general partner in an ETP Holder partnership; and who has been approved by the Corporation as an Allied Person.

approved by the Corporation as an Approved Person.

NYSE Arca Equities Rule 6.18(b)(2) refers to the designation of a person with authority to reasonably discharge his/her duties and obligations in connection with supervision and control of the activities of the Associated Persons of the ETP Holder. Pursuant to NYSE Arca Equities Rule 1.1(f), the term "Associated Person" shall refer to a person who is a partner, officer, director, member of a limited liability company, trustee of a business trust, employee of an ETP Holder or any person directly or indirectly controlling, controlled by or under common control with an ETP Holder.

NYSE Arca ETP Application - March 2017

SECTION 5 STATUTORY DISQUALIFICATION DISCLOSURE

Pursuant to the Securities Exchange Act of 1934, as amended ("the Act"), NYSE Arca, Inc. ("NYSE Arca") may deny (or may condition) trading privileges or may bar a natural person from becoming associated (or may condition an association) with an ETP Holder for the same reasons that the Securities and Exchange Commission may deny or revoke a broker-dealer registration under the Act. The Act provides for Statutory Disqualification if a person has:

- Been expelled, barred or suspended from membership in or being associated with an member of a self regulatory organization;
- had broker, dealer or similar privileges denied or suspended or caused such denial or suspension of another;
- · Violated any provision of the Act; or
- Been convicted of a theft or securities related misdemeanor or any felony within ten (10) years of the date of applying for membership status or becoming an Associated Person.

Check here if you DO NOT have person(s) associated with the Applicant Broker-Dealer who is or may be subject to Statutory Disqualification.

Check here if you DO have person(s) associated with the Applicant Broker-Dealer who is or may be subject to Statutory Disqualification.*

Please identify any such person(s) associated with the Applicant Broker-Dealer who is or may be subject to Statutory Disqualification. Additionally, identify any such person(s) who are associated with the Applicant Broker-Dealer and who have been approved for association or continued association by another SRO due to a Statutory Disqualification.

- * Attach a sheet identifying any such person(s), including the following information:
 - 1. Name of the person(s).
 - 2. Copies of documents relating to the Statutory Disqualification.
 - 3. Description of each such person's duties (for non-registered individuals, this should include a statement indicating if the position allows access to books, records, funds or securities).
 - 4. Explanation of action taken or approval given by any other SRO regarding each person.

understand the above and the attached inforr documents) are true and complete to the bes pursuant to this Notice in order to preliminarily NYSE Arca will also perform a complete back immediately revoked by NYSE Arca depending will be subject to a disciplinary action if false of the subject to a disciplinary action.	mation, and that the answers and the t of my knowledge. I acknowledge the gapprove or deny Applicant Broker-Deground check of Applicant Broker-Deground check of Applicant Broker-Deground the results of such background or misleading answers are given purshit to NYSE Arca any amendment to a	at NYSE Arca shall rely on the information provided lealer's application for trading privileges, but that aler, and such trading privileges may be check. I understand that Applicant Broker-Dealer uant to this Notice. I also acknowledge the ny document submitted as part of its application,
Signature of Authorized Officer, Partner, Manager Proprietor	ging Member, or Sole	Date
Print Name of Authorized Officer, Partner, Man Proprietor	aging Member, or Sole	Title

SECTION 6 - SUPERVISION

Each ETP Holder must identify the person(s) that is a member, partner, director, or officer exercising executive responsibility (or having similar status or functions) for supervising an Authorized Trader(s) as defined in NYSE Arca Equities Rule 1.1(g). ETP Holders must provide a copy of their Written Supervisory Procedures ("WSP") with their Application.

Name and Title of Person responsible for maintaining WSPs: _	
--	--

NYSE Arca Equities Rules state:

- (a) Adherence to Law No Equity Trading Permit Holder or Associated Person of an Equity Trading Permit Holder may engage in conduct in violation of the federal securities laws, the Constitution or the Rules of the Exchange. Every Equity Trading Permit Holder must supervise persons associated with the Equity Trading Permit Holder as to assure compliance therewith.
- (b) Supervisory System Each Equity Trading Permit Holder for whom NYSE Arca is DEA must establish and maintain a system to supervise the activities of its associated persons and the operations of its business. Such system must be reasonably designed to ensure compliance with applicable federal securities laws and regulations and NYSE Arca Equities Rules. Final responsibility for proper supervision will rest with the Equity Trading Permit Holder. The Equity Trading Permit Holder's supervisory system must provide, at a minimum, for the following:
 - (1) The establishment and maintenance of written procedures as required by paragraph (c) of this Rule.
 - (2) The designation of a person with authority to reasonably discharge his/her duties and obligations in connection with supervision and control of the activities of the associated persons of the Equity Trading Permit Holder.
 - (3) The Equity Trading Permit Holder must undertake reasonable efforts to determine that all supervisory personnel are qualified by virtue of experience or training to carry out their assigned responsibilities.
 - (4) Each Equity Trading Permit Holder must designate and specifically identify to NYSE Arca one or more persons who will be responsible for such supervision.
- (c) Written Procedures Each Equity Trading Permit Holder must establish, maintain, and enforce written procedures to supervise the business in which it engages and to supervise the activities of its associated persons that are reasonably designed to ensure compliance with applicable federal securities laws and regulations, and with NYSE Arca Equities Rules.

Pursuant to this rule, WSPs should describe the following:

- Specific identification of the individual(s) responsible for supervision either by name or by title and position.
- The supervisory steps and reviews to be taken by the appropriate supervisor this process should identify any exception reports
 and/or other documents being reviewed and the substantive area being reviewed (e.g., limit order protection, trade reporting,
 etc.). If an ETP Holder employs automated systems as part of its supervisory system, those systems should also be generally
 described.
- The frequency of such reviews this should be more specific than simply providing for "a review" or a "review from time to time." The frequency of reviews should be described (i.e., daily, weekly, monthly, quarterly, or annually).
- How reviews will be documented, for example, initialing order tickets or filling out review logs. The procedures should also provide for the documentation of steps taken as a result of supervisory reviews.

For Market Makers, the WSPs and supervisory systems of firms engaged in market making activities must address, at a minimum, trading practice rules (i.e., passive market making, firm quote rule compliance, limit order protection), trading systems, trade reporting, rules compliance and any other material aspect of the firm's market making business. WSPs should include the following subject areas:

- Size conventions
- · Coordination of quotations, trades and trade reports
- Improper collaboration and coordination of Market Maker activities
- Failure to honor quotations
- Harassment
- Late and inaccurate trade reporting

ALL EQUITY TRADING PERMIT HOLDERS MUST KEEP ABREAST OF CHANGES IN LAWS, RULES AND REGULATIONS, MARKET PRACTICES AND INDICATED PATTERNS OF NON-COMPLIANCE AND MUST MODIFY THEIR SUPERVISORY PROCEDURES AND SYSTEMS AS NECESSARY.

SECTION 7 – CLEARING LETTER OF CONSENT		
	learing ETP Holder of Application Broker-Dealer	
The undersigned hereby represents the clearing as ("NSCC"), and an approved ETP Holder of NYSE A	gency named below, a member of the National Securities Clearing Corporation Arca, LLC, a facility of NYSE Arca.	
The undersigned Clearing ETP Holder hereby agre carried in all accounts held by the following Applica	ees to accept full financial responsibility for all transactions effected through and ant Broker-Dealer with the clearing agency:	
Applicant Broker-Dealer	CRD# and/or SEC File#	
Rules and may be relied upon by NYSE Arca Equi	, letter of authorization, or notice of consent pursuant to NYSE Arca Equities ties, NYSE Arca, Inc., the NSCC, and their respective members. This Notice of ules, as amended from time to time, and shall remain in effect until revoked in	
Clearing ETP Holder (Broker-Dealer Name)		
Clearing ETP Holder (NSCC Clearing #)		
Signature of Authorized Officer, Partner or Managing Member of Clearing ETP Holder	Signature of Authorized Officer, Partner or Managing Member, or Sole Proprietor of ETP Holder	
Print Name / Title	Print Name / Title	
Date	Date	

NYSE Arca Equities, Inc.

Contracts

SECTION 8 - ARCHIPELAGO SECURITIES™ ROUTING AGREEMENT

Provided that User is an ETP Holder of NYSE Arca Equities and subject to a valid, ongoing User Agreement with NYSE Arca, LLC; Archipelago Securities, LLC (hereinafter "Archipelago Securities"), a broker-dealer registered in accordance with Section 15(a) of the Securities Exchange Act of 1934, agrees to act as agent to User for the purpose of providing certain routing services, as described herein, provided that User is bound by the terms and conditions of this Routing Agreement and any applicable rules and interpretations of NYSE Arca Equities Rules. Whereas Archipelago Securities provides certain order routing services for NYSE Arca Equities, and User desires to use the order routing facilities of NYSE Arca Equities and NYSE Arca, for good and valuable consideration. User and Archipelago Securities agree as follows:

1. ROUTING SERVICES.

Archipelago Securities, a wholly owned subsidiary of Archipelago Holdings, Inc., agrees to act as agent of the User for routing orders entered into NYSE Arca to the applicable market centers or broker-dealers for execution, whenever such routing is required in accordance with NYSE Arca Equities Rules. User understands and agrees that orders executed on its behalf shall at all times be subject to the terms and conditions of NYSE Arca Equities Rules.

2. ORDERS NOT ELIGIBLE FOR ROUTING SERVICES.

User agrees that Archipelago Securities will not execute any orders that are not eligible for order routing in accordance with NYSE Arca Equities Rules. For example, NYSE Arca Equities Rules may provide that if a User has indicated that an order must not be routed to another market center for execution (*i.e.*, by designating an order as a fill-or-return or fill-or-return plus order), the order will not be eligible for routing services provided by Archipelago Securities.

3. CANCELLATION; MODIFICATION OF ORDERS.

User agrees that any requests regarding cancellation or modification of orders shall be subject to NYSE Arca Equities Rules. User understands that such rules may provide that requests to cancel orders while the order is routed away to another market center and remains outside NYSE Arca will be processed by Archipelago Securities, subject to the applicable trading rules of the relevant market center.

4. TRANSMISSION OF ORDER INSTRUCTIONS.

User agrees that all orders on its behalf must be transmitted to Archipelago Securities through NYSE Arca. User agrees that NYSE Arca is its exclusive mechanism for purposes of transmitting orders on its behalf to Archipelago Securities and for receiving notice regarding such orders. Archipelago Securities shall be entitled to rely upon and act in accordance with any order instructions received from NYSE Arca on behalf of User. User agrees that all order executions effected on behalf of User pursuant to this agreement shall be reported by Archipelago Securities to NYSE Arca. The User shall be notified of such executions through NYSE Arca.

5. CLEARANCE AND SETTLEMENT.

User agrees that all transactions executed on its behalf shall be processed in accordance with NYSE Arca Equities Rules. If User is an ETP Holder, User agrees that orders executed or its behalf by Archipelago Securities shall be automatically processed by NYSE Arca for clearance and settlement on a locked-in basis. If User is a Sponsored Participant, User agrees that all orders executed on its behalf by Archipelago Securities shall be cleared and settled, using the relevant Sponsoring ETP Holder's mnemonic (or its clearing firm's mnemonic as applicable).

6. TERM OF AGREEMENT.

This Routing Agreement will be effective as of the Effective Date and will remain in effect thereafter until terminated by either party upon notice to the other party. Termination will be effective at the close of trading in the affected markets and applications on the day that notice of termination is received by the other party hereto. Archipelago Securities may terminate this Routing Agreement immediately if (i) the User is in breach of this Routing Agreement for any reason, (ii) any representations made by the User in connection with this Agreement or the User Agreement are or become false or misleading or (iii) User is no longer a ETP Holder or Sponsored Participant of NYSE Arca Equities or otherwise authorized to access NYSE Arca. Upon the termination of this Agreement or the User Agreement for any reason, all rights granted to User hereunder will cease. The provisions of Paragraphs 7, 8, 9 and 10 will survive the termination or expiration of this Routing Agreement for any reason. In no event will termination of this Routing Agreement relieve User of any obligations incurred through its use of NYSE Arca.

SECTION 8 - ARCHIPELAGO SECURITIES M ROUTING AGREEMENT (CONTINUED)

7. INDEMNITY.

User agrees to indemnify, defend and hold Archipelago Securities harmless from and against any and all claims, demands, losses, costs, expenses, obligations, liabilities, damages, recoveries, and deficiencies, including interest, penalties, and attorneys' fees, arising from or as a result of User's breach of its obligations under this Agreement or otherwise from its use of the Archipelago Securities routing services.

8. DISCLAIMER OF WARRANTY.

ROUTING SERVICES ARE PROVIDED "AS IS" AND WITHOUT WARRANTY OF ANY KIND. ALL WARRANTIES, CONDITIONS, REPRESENTATIONS, INDEMNITIES AND GUARANTEES WITH RESPECT TO THE ROUTING SERVICE, WHETHER EXPRESS, IMPLIED, OR STATUTORY, ARISING BY LAW, CUSTOM, PRIOR ORAL OR WRITTEN STATEMENTS BY ARCHIPELAGO SECURITIES, NYSE Area EQUITIES OR ITS OR THEIR AGENTS, AFFILIATES, LICENSORS OR OTHERWISE (INCLUDING, BUT NOT LIMITED TO ANY WARRANTY OF SATISFACTORY QUALITY, ACCURACY, UNINTERRUPTED USE, TIMELINESS, TRUTHFULNESS, SEQUENCE, COMPLETENESS, MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE OR NON-INFRINGEMENT AND ANY IMPLIED WARRANTIES ARISING FROM TRADE USAGE, COURSE OF DEALING OR COURSE OF PERFORMANCE) ARE HEREBY OVERRIDDEN, EXCLUDED AND DISCLAIMED.

9. NO LIABILITY FOR TRADES.

USER UNDERSTANDS AND AGREES THAT (I) ARCHIPELAGO SECURITIES IS NOT LIABLE IN ANY MANNER TO ANY PERSON (INCLUDING WITHOUT LIMITATION THE USER AND ANY PERSON FOR WHOM THE USER IS AUTHORIZED TO TRADE OR ACT) FOR THE FAILURE OF ANY PERSON ENTERING INTO A TRADE OR TRANSACTION BY MEANS OF NYSE Arca TO PERFORM SUCH PERSON'S SETTLEMENT OR OTHER OBLIGATIONS UNDER SUCH TRADE OR TRANSACTION. NEITHER ARCHIPELAGO SECURITIES, OR ITS AGENTS, AFFILIATES OR LICENSORS WILL BE LIABLE FOR ANY LOSSES, DAMAGES, OR OTHER CLAIMS, ARISING OUT OF THE ROUTING SERVICE OR ITS USE. ANY LOSSES, DAMAGES, OR OTHER CLAIMS, RELATED TO A FAILURE OF ARCHIPELAGO SECURITIES TO DELIVER, DISPLAY, TRANSMIT, EXECUTE, COMPARE, SUBMIT FOR CLEARANCE AND SETTLEMENT, OR OTHERWISE PROCESS AN ORDER, MESSAGE, OR OTHER DATA ENTERED INTO, OR CREATED BY, NYSE Arca WILL BE ABSORBED BY THE USER OR THE ETP HOLDER SPONSORING THE USER, THAT ENTERED THE ORDER, MESSAGE OR OTHER DATA INTO NYSE Arca. IF THIS SECTION IS DEEMED TO CONFLICT WITH ANY OTHER SECTION OF THIS USER AGREEMENT, THIS SECTION WILL SUPERCEDE SUCH OTHER SECTION.

10. NO CONSEQUENTIAL DAMAGES. UNDER NO CIRCUMSTANCES WILL ARCHIPELAGO SECURITIES, NYSE Arca EQUITIES OR ITS OR THEIR AGENTS, AFFILIATES OR LICENSORS BE LIABLE FOR ANY LOSS, DAMAGE, CLAIM OR EXPENSE, INCLUDING WITHOUT LIMITATION ANY DIRECT, CONSEQUENTIAL, INDIRECT, SPECIAL, PUNITIVE OR INCIDENTAL DAMAGES OR LOST PROFITS, WHETHER FORESEEABLE OR UNFORESEEABLE, BASED ON USER'S CLAIMS OR THE CLAIMS OF ITS CUSTOMERS, EMPLOYEES OR AGENTS (INCLUDING, BUT NOT LIMITED TO, CLAIMS FOR LOSS OF DATA, GOODWILL, USE OF MONEY OR USE OF ROUTING SERVICES, INTERRUPTION IN USE OR AVAILABILITY OF ARCHIPELAGO SECURITIES, STOPPAGE OF OTHER WORK OR IMPAIRMENT OF OTHER ASSETS), ARISING OUT OF BREACH OR FAILURE OF EXPRESS OR IMPLIED WARRANTY, BREACH OF CONTRACT, MISREPRESENTATION, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE. THIS SECTION WILL NOT APPLY ONLY WHEN AND TO THE EXTENT THAT APPLICABLE LAW SPECIFICALLY REQUIRES LIABILITY, DESPITE THE FOREGOING EXCLUSION AND LIMITATION.

11. ASSIGNMENT.

User shall not assign, delegate or otherwise transfer this Routing Agreement or any of its rights or obligations hereunder without Archipelago Securities' prior approval, which will not be unreasonably withheld. Archipelago Securities may assign or transfer this Routing Agreement or any of its rights or obligations hereunder to a related or unrelated party upon notice to User.

12. FORCE MAJEURE.

Notwithstanding any other term or condition of this Routing Agreement to the contrary, neither Archipelago Securities nor User will be obligated to perform or observe their obligations undertaken in this Routing Agreement if prevented or hindered from doing so by any circumstances found to be beyond their control.

13. MISCELLANEOUS. All notices or approvals required or permitted under this Routing Agreement must be given in writing to the address specified above. Any waiver or modification of this Routing Agreement will not be effective unless executed in writing and signed by the other party, provided that this agreement shall at all times be interpreted to effect the rules and interpretations of NYSE Arca Equities, as applicable. This Routing Agreement will bind each party's successors-in-interest. This Routing Agreement will be governed by and interpreted in accordance with the internal laws of the State of New York. USA. All disputes, claims or controversies between the parties hereto will be submitted to arbitration in New York. New York. This Routing Agreement, together with the applicable NYSE Arca Equities Rules, constitutes the complete and entire statement of all conditions and representations of the agreement between Archipelago Securities and User with respect to its subject matter and supersedes all prior writings or understandings. Accepted on behalf of ETP Holder: By (Signature): Name: Title: Date:

SECTION 9 – INDIVIDUAL REGISTRATION Provide the information requested below for each of the requested individuals associated with the Applicant Broker-Dealer. Pursuant to NYSE Arca Equities Rule 6.18, all applicants must designate a Series 24 licensed principal. Applicants subject to Exchange Act Rule 15c3-1 are required to have a designated Series 27 licensed principal, pursuant to NYSE Arca Equities Rules 4.5 Additionally, Authorized Traders for whom NYSE Arca will be the DEA are required to have successfully passed the Series 7 examination, pursuant to NYSE Arca Equities Rule 2.4. Proof of examination requirements, fingerprint card submission, and Form U-4s should be submitted by the Applicant to Web CRD® for review by NYSE Arca. For individuals required to be disclosed below who do not have required information available on Web CRD®, the Applicant may be required to submit an investigation fee of \$125 per individual DESIGNATED SERIES 24 LICENSED PRINCIPAL Name: CRD: Phone: Email:

Name:	CRD:
Phone:	<u> </u>
Email:	
DESIGNATED SERIES 27 LICENSED PRINCIPAL	
Name:	CRD:
Phone:	
Email:	·
AUTHORIZED TRADER	
Name:	CRD:
Phone:	
Email:	
AUTHORIZED TRADER	
Name:	CRD:
Phone:	
Email:	
AUTHORIZED TRADER	
Name:	CRD:
Phone:	
Email:	
AUTHORIZED TRADER	
Name:	CRD:
Phone:	
Email:	

Additional Authorized Traders are submitted in a separate document attached hereto

SECTION 9 (CONTINUED		
Please identify the key personnel who hold the below positions (or the individual whose responsibilities are the functional equivalent of such position, regardless of actual titles used by the Applicant Firm) and who will want to receive communications pertaining to our equities markets.		
Chief Executive Officer ("C	EO")	
Name:	c	RD:
Phone:		
Email:		
Chief Financial Officer ("CF	FO")	
Name:	C	RD:
Phone:		
Email:		
Chief Compliance Officer (
Cilier Compliance Cilicer (
Name:	C	RD:
Phone:		
Email:		
Chief Operations Officer ("	COO")	
Name:	0	CRD:
Phone:		
Email:		
Head of Clearing	······································	
Name:	C	CRD:
Phone:		
Email:		
Head of Connectivity		
		200
Name:		CRD:
Phone:		
Email:		
Head of Trading		
Name:		CRD:
Phone:		
Email:		

NYSE Arca Equities, Inc.

DEA Application Requirements

SECTION 10- DESIGNATED EXAMINING AUTHORITY (DEA) REQUIREMENTS		
ITSFEA COMPLIANCE ACKNOWLEDGEMENT		
This form should be completed by a Director, Officer, General Partner or I Dealer's ITSFEA Compliance Procedures are followed. In the future, the NYSE Arca along with the Broker-Dealer's year-end FOCUS Report (Form	his certification must be completed and filed with	
Broker-Dealer:	_	
SEC #		
The undersigned states and certifies as follows:		
It is understood that should any Director, Officer, General Partner or Associated of the Broker-Dealer acquire material, non-public information concerning a corp a violation of NYSE Arca Equities Rules and Federal securities laws to misuse corporation, or any options or other derivative securities based thereon, while so It is further understood that should any Director, Officer, General Partner or Associated Federal securities laws to make improper use of such information in connection any option or other derivative based thereon. It is also understood that it may be a violation of NYSE Arca Equities Rules and or entity any non-public, material corporate or market information that may be a securities. Additionally, the Broker-Dealer represents that it has established written promaterial non-public information by the Broker-Dealer or by any of the Broker-Dealer and Persons, taking into consideration the nature of the Broker-Dealer's The Individual(s) responsible for overseeing and supervising the specific electomy considered persons accounts of Directors, Officers, General Partners, and Associated Persons of the Broker-Dealer's General Partners, and Associated securities accounts of Directors, Officers, General Partners, and Associated persons in the assessment of the adequacy of those procedures and of the those procedures (except as to any securities transactions involving the possible been reported to NYSE Arca), there is no reasonable cause to believe that Persons of the Broker-Dealer has misused, made improper use of, or disclose in violation of NYSE Arca Equities Rule 6.3	coration whose securities are publicly traded, it may be such information or trade any securities issued by the such information remains non-public. Sociated Person of the Broker-Dealer obtain material, les, it may be a violation of NYSE Arca Equities Rules action with trading in the security, group of securities or a Federal securities laws to disclose to any other person acquired regarding a publicly traded security or group of accedures reasonably designed to prevent misuse of aker-Dealer's Directors, Officers, General Partners or business. Sement of the member firm or organization's ITSFEA accedence and required by the firm's written ITSFEA compliance and required by the firm's written ITSFEA compliance authority and diligence of the person(s) carrying out le misuse of non-public information which already have any Director, Officer, General Partner, or Associated	
Accepted on behalf of ETP Holder:		
Signature of Authorized Officer, Partner, Managing Member, or Sole Proprietor	Date	
Print Name of Authorized Officer, Partner, Managing Member, or Sole Proprietor	Title	

NYSE Arca Equities, Inc.

Equity Trading Permit Short Form Application

NYSE Arca Equities Short Form ETP Membership Application and Agreement

To qualify for Short Form Equities Trading Permit (ETP) Membership on NYSE Arca, the applicant must be an approved NYSE Arca Options Trading Permit (OTP) Holder. Current OTP Holder applicants are eligible for expedited approval. To apply, please complete and submit this Short Form Application, Membership Agreement, Clearing Letter of Consent and NYSE Arca Equities User Agreement to:

NYSE Arca Equities
Attn: Client Relationship Services
Email: crs@nyse.com

KEY PERSONNEL		
Please identify the key personnel who hold the below positions (or the individual whose responsibilities are the functional equivalent of such position, regardless of actual titles used by the Applicant Firm) and who will want to receive communications pertaining to our equities markets.		
Chief Executive Officer ("CEO")		
Name:	CRD:	
Phone:		
Email:		
Chief Financial Officer ("CFO")		
Name:	CRD:	
Phone:		
Email:		
Chief Compliance Officer ("CCO")		
Name:	CRD:	
Phone:		
Email:		
Chief Operations Officer ("COO")		
Name:	CRD:	
Phone:		
Email:		
Head of Clearing		
Name:	CRD:	
Phone:		
Email:		
Head of Trading		
Name:	CRD:	
Phone:	· · · · · · · · · · · · · · · · · · ·	
Email:		

SECTION 1 – Short Form Membership Application			
Short Form Eligibility:			
Applicant is currently a member in good sta	nding of NYSE Arca Option	s	
General Information			
Name of Applicant Broker-Dealer:			
Business Address:			
City:	State:	Zip Code:	
Business Phone:			
Email:			
Web Address, if any:			
CRD Number:			
NYSE Arca Options OTP ID:			
Designated Examining Authority:			
Contact Information			
Contact Name:			_
Job Title / Position			
Phone:	Email:		
Type of Business to be Conducted With Equity Trading	Permit (Check all that app	ly)	
Market Maker*	— Public Custom		
Clearing Services	_		
_	Proprietary Tr	ading	
Other			
* Please also complete Application for Market Maker Registration			

3

SECTION 2 – Membership Agreement	
Applicant Broker-Dealer agrees to abide by the Bylaws and f to time, and all circulars, notices, interpretations, directives o	Rules of NYSE Arca Equities, Inc., as amended from time r decisions adopted by NYSE Arca Equities, Inc.
Applicant Broker-Dealer authorizes any SRO, commodities eto NYSE Arca, upon its request, any information that such per and reputation of Applicant Broker-Dealer or its associated properties and information. Applicant Broker-Dealer or its associated provernmental agency, SRO, commodities exchange or similar Applicant Broker-Dealer or its associated persons, and release such information.	erson may have concerning the ability, business activities, ersons, and releases such person or entity from any and ealer authorizes NYSE Arca to make available to any ar entity, any information it may have concerning the
Applicant Broker-Dealer acknowledges its obligation to update application, including termination of membership with anothe Broker-Dealer's DEA. It is understood that in that event, add	r SRO, which may cause a change in the Applicant
Applicant Broker-Dealer:	
Signature of Authorized Officer, Partner, Managing Member or Sole Proprietor:	Date:

Print Name:

_____ Title: _____

SECTION 3 – Clearing Letter of Consent				
Notice of Consent - To be completed by Clea	ring ETP Holder of Application Broker-Dealer			
The undersigned hereby represents the clearing Corporation ("NSCC"), and an approved ETP Ho	agency named below, a member of the National Securities Clearing lder of NYSE Arca, LLC, a facility of NYSE Arca.			
The undersigned Clearing ETP Holder hereby ag through and carried in all accounts held by the fo	grees to accept full financial responsibility for all transactions effected ollowing Applicant Broker-Dealer with the clearing agency:			
Applicant Broker-Dealer	CRD# and/or SEC File#			
This section shall be deemed a letter of guarantee, letter of authorization, or notice of consent pursuant to NYSE Arca Equities Rules and may be relied upon by NYSE Arca Equities, NYSE Arca, Inc., the NSCC, and their respective members. This Notice of Consent shall be subject to NYSE Arca Equities Rules, as amended from time to time, and shall remain in effect until revoked in writing by the Clearing ETP Holder.				
Clearing ETP Holder (Broker-Dealer Name)				
Clearing ETP Holder (NSCC Clearing #)				
Signature of Authorized Officer, Partner or Managing Member of Clearing ETP Holder	Signature of Authorized Officer, Partner or Managing Member, or Sole Proprietor of ETP Holder			
Print Name / Title	Print Name / Title			
Date	Date			

Options Trading Permit Application

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APPLICATION PROCESS

Filing Requirements

Prior to submitting the <u>Application for Options Trading Permit ("OTP")</u>, an Applicant Broker-Dealer must file a Uniform Application for Broker-Dealer Registration (Form-BD) with the Securities and Exchange Commission and register with the FINRA Central Registration Depository ("Web CRD®").

Checklist

Applicant Broker-Dealer must complete and submit all applicable materials addressed in the Application Checklist (page 4) to: crs@nyse.com

Note: All application materials sent to NYSE Arca will be reviewed by NYSE Arca's Client Relationship Services Department for completeness. The applications are submitted to FINRA who performs the application approval recommendation. All applications are deemed confidential and are handled in a secure environment. CRS or FINRA may request applicants to submit documentation in addition to what is listed in the Application Checklist during the application review process, pursuant to NYSE Arca Rule 2.4. If you have questions on completing the application, you may direct them to: Client Relationship Services: Email: crs@nyse.com or (212) 896-2830 option 5.

Application Process

- Following submission of the Application for Options Trading Permit and supporting documents to NYSE Arca, Inc. ("NYSE Arca"),
 the application will be reviewed for accuracy and regulatory or other disclosures. NYSE Arca will submit the application to FINRA for
 overall review and approval recommendation; NYSE Arca Compliance and Regulation complete the final review and approval.
- If review of Statutory Disqualification Disclosure information and/or a background investigation indicates that the Applicant has an associated person(s) with a possible statutory disqualification, NYSE Arca will contact the representative of the Applicant to discuss the statutory disqualification process.
- If it appears that the Applicant has outstanding debt, civil judgment actions and/or regulatory disciplinary actions, the Applicant will be contacted by NYSE Arca for further information.
- Applicants who have completed and returned all documents without indication of a statutory disqualification, outstanding debt, civil
 judgment actions and/or regulatory disciplinary actions will be presented to NYSE Arca for approval or disapproval without delay.
 NYSE Arca shall post the name of the Applicant Broker-Dealer and its proposed Nominee for a period of three (3) business days in
 the NYSE Arca Weekly Bulletin.
 - Applicants will be subject to disciplinary action if false or misleading answers are given pursuant to the Application for Options Trading Permit
- All individuals required to be registered with NYSE Arca, pursuant to the Rules, shall file documentation with the Exchange in the manner prescribed in NYSE Arca Rule 2.23 requesting such registration. NYSE Arca does not accept fingerprint cards. Fingerprint cards must be submitted directly to FINRA within 30 days of filing the Form U4. The fingerprint cards must be cleared by the FBI for individuals who seek to register with NYSE Arca or be approved by NYSE Arca. Firms may request FINRA-approved fingerprint cards through the Gateway Call Center at: (301) 590-6500. Fingerprint cards should be sent directly to: For Regular U.S. Mail: FINRA, Registration and Disclosure Department, P.O. Box 9495, Gaithersburg, MD 20898-9495. P.O. Boxes will not accept courier or overnight deliveries. For Express/Overnight Mail Delivery: FINRA, Registration and Disclosure Department, 9509 Key West Avenue, Rockville, MD 20850. If a phone number is required for the recipient, provide: (301) 590-6500. Your firm should receive the FBI search results in the "Fingerprint Status Received from FBI Notice Queue" within three business days after the card is sent to the FBI. Additional information regarding the submission of fingerprints to Web CRD may be obtained on the FINRA Web site: https://firms.finra.org/webcrd.
- NYSE Area will promptly notify the Applicant, in writing, of their membership decision.
- An OTP must be activated within six months of approval by NYSE Arca. Applicant Broker-Dealers that have been approved by NYSE Arca are not considered active OTP Firms until an OTP has been placed in the name of a Nominee. Nominees must be approved by NYSE Arca before becoming an OTP Holder on behalf of an OTP Firm. OTP Firms that are off-floor trading firms or provide clearing services on NYSE Arca and are not conducting market maker or floor broker activities are required to designate an "Office Nominee" as its OTP Holder.
- In the event an Applicant is disapproved by NYSE Arca, the Applicant has an opportunity to be heard upon the specific grounds for the disapproval, in accordance with the provisions of NYSE Arca Rule 10.14. A disapproved applicant desiring to be heard must, within thirty (30) calendar days of the date upon which the Corporation's decision was mailed to the applicant, file a petition in accordance with the provisions of NYSE Arca Rule 10.14.

Section 9 does not apply NYSE Master User Agreement Form BD, including Schedules & Disclosure Reporting pages must be up to date and accurate on FINRA's Web CRD®. A Form U-4 and Fingerprint cards for the following individuals needs to be submitted directly to the FINRA, if not currently available on Web CRD®: Direct/Indirect Owners, Allied Persons, and Approved Persons as listed on Form BD Schedules A & B Designated supervisors and principals All Authorized Traders Financial Documentation \Box Four (4) Most Recent FOCUS Reports and the Most Recent Audited Financial Statements, if applicable Most Recent Balance Sheet and Capital Computation Six Month Profit/Loss Projection All examination reports and corresponding responses from the Applicant Broker-Dealer for the last two exam reports Copy of Written Supervisory Procedures², Anti-Money Laundering Procedures, and Insider Trading Act Procedures (if separate) Organizational Documents: Articles of Incorporation and Bylaws; Partnership Agreement; Limited Liability Company ("LLC") Agreements; Operating Agreement; or similar documentation CHECKLIST FOR NYSE Arca DEA BROKER-DEALER APPLICANTS Application for Options Trading Permit Section 8 only if you are not self-clearing \Box NYSE Master User Agreement Form BD, including Schedules & Disclosure Reporting pages must be up to date and accurate on FINRA's Web CRD®. A Form U-4 and Fingerprint cards for the following individuals needs to be submitted directly to the FINRA, if not currently available on Web CRD®1. Direct/Indirect Owners, Allied Persons, and Approved Persons as listed on Form BD Schedules A & B Designated supervisors and principals All Authorized Traders Financial Documentation Four (4) Most Recent FOCUS Reports² and the Most Recent Audited Financial Statements, if applicable Most Recent Balance Sheet and Capital Computation

APPLICATION CHECKLIST & FEES

Application for Options Trading Permit

Six Month Profit/Loss Projection Subordination Agreements, if applicable

Agreements; Operating Agreement; or similar documentation

Section 8 only if you are not self-clearing

CHECKLIST FOR NON-NYSE Arca DEA BROKER-DEALER APPLICANTS

Note: For a list of all fees, please review the "NYSE Arca Options Fees and Charges" found at https://www.nyse.com/markets/fees

Copy of Written Supervisory Procedures 2, Anti-Money Laundering Procedures, and Insider Trading Act Procedures (if separate)

Organization Documents: Articles of Incorporation and Bylaws; Partnership Agreement; Limited Liability Company ("LLC")

All examination reports and corresponding responses from the Applicant Broker-Dealer for the last two exam reports

Proprietary Accounts of Introducing Broker-Dealers (PAIB) Agreements, if applicable

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¹ Applicants must demonstrate that they have current net capital of 140% of their minimum net capital requirement or \$20,000 in excess of their minimum dollar net capital requirement, whichever is greater. If the Broker-Dealer has reported net losses for the period reviewed, the Firm's financial statements must demonstrate that its excess net capital can withstand six (6) consecutive months of average losses. Applicant Broker-Dealers that do not have the requested financial information available are required to submit Pro Forma Financial statements reflecting the Balance Sheet and Profit & Loss Statement detail for each month for the most recent six (6) months or since inception, whichever is less.

whichever is less.

Market Maker applicants must include, but are not limited to, the following NYSE Arca Option Rules: 6.32 – 6.41 (Market Makers), 6.82, 6.84 & 6.85 (Lead Market Makers), 6.83 (Limitations on Dealings of Lead Market Makers/Information Barriers), 11.3 (Prevention of the Misuse of Material, Nonpublic Information), 11.18 (Supervision), and 11.19 (Anti-Money Laundering Compliance Program).

EXPLANATION OF TERMS

For purposes of this application, the following terms shall have the following meanings:

Applicant – the Broker-Dealer organization applying for an Options Trading Permit or amending this form.

Associated Person - a person who is a partner, officer, director, member of a LLC, trustee of a Business Trust, or employee of an OTP Holder or any person directly or indirectly controlling, controlled by or under common control with an OTP Holder.

Authorized Trader ("AT") – an individual who may submit orders to the Exchange on behalf of his or her OTP Firm or Sponsored Participant.

Central Registration Depository System ("Web CRD®") – A centralized electronic registration system maintained by FINRA which provides information on registered representatives and principals for members of participant organizations. This database contains employment history, exam scores, licensing information, disciplinary actions, fingerprint results, and other related registration information. NYSE Arca, Inc. is a participant of this system.

Clearing Member – an OTP Firm which has been admitted to membership in the Options Clearing Corporation ("OCC") pursuant to the provisions of the rules of the OCC. A Broker-Dealer who receives and executes customers' instructions, prepares trade confirmations, sends the money related to the trades, arranges for the physical movement of securities, and shares responsibility with an introducing broker-dealer for compliance with regulatory requirements.

Control – (as defined on Form-BD) the power, directly or indirectly, to direct the management or policies of a company, whether through ownership of securities, by contract or otherwise. Any person that (1) is a director, general partner or officer exercising executive responsibility (or having similar status or functions); (2) directly or indirectly has the right to vote 25% or more of a class of a voting security or has the power to sell or direct the sale of 25% or more of a class of voting securities; or (3) in the case of a partnership, has the right to receive upon dissolution, or has contributed, 25% or more of the capital, is presumed to control that company.

Designated Examining Authority ("DEA") – the SEC will designate one Self-Regulatory Organization ("SRO") to be a Broker-Dealer's examining authority, when the Broker-Dealer is a Member or OTP Holder of more than one SRO. Every Broker-Dealer is assigned a DEA, who will examine the Broker-Dealer for compliance with financial responsibility rules.

Designated Supervisor – refers to any person that is a partner, director, or officer exercising executive responsibility (or having similar status or functions) for supervising registered employees.

Direct Owners/Executive Officers – Allied Persons and Approved Persons, as those terms are defined by NYSE Arca Rules 1.1(b) and 1.1(c), respectively, and generally refer to (1) a director, general partner or officer exercising executive responsibility (or having similar status or function); or (2) directly or indirectly has the right to vote 5% or more of a class of voting security or has the power to sell or direct the sale of 5% or more of a class of voting securities; (3) is entitled to receive 5% or more of the net profits; (4) in the case of a partnership, all general partners and those limited and special partners that have the right to receive upon dissolution or have contributed, 5% or more of the capital; or (5) in the case of a LLC, those members that have the right to receive upon dissolution, or have contributed, 5% or more of the LLC's capital, and if managed by elected managers, all elected managers.

Financial Arrangement – (1) the direct financing of an OTP Holder's dealings upon the Exchange; (2) any direct equity investment or profit sharing arrangement; or (3) any consideration over the amount of \$5,000.00 including, but not limited to, gifts, loans, annual salaries or bonuses.

Firm Proprietary and/or Agency Trading – an OTP Firm that engages in off-floor trading that is unrelated to the performance of that OTP Firm's registered market maker or floor broker functions.

Market Maker – an OTP Firm or OTP Holder that acts as a Market Maker pursuant to Rule 6.32A and submits quotes electronically and makes transactions as a dealer-specialist through the facilities of the Exchange from on the trading floor or remotely from off the trading floor.

Market Maker Authorized Trader ("MMAT") – an Authorized Trader who performs market making activities pursuant to Rules 6 and 6A on behalf of an OTP Firm or OTP Holder registered as a Market Maker. To be approved as an MMAT, a person must demonstrate knowledge of the Rules of the Exchange by passing an examination prescribed by the Exchange. MMATs may be officers, partners, employees, or associated persons of OTP Firms that are registered with the Exchange as Market Maker.

EXPLANATION OF TERMS (CONTINUED)

Nominee – an individual who is authorized by an OTP Firm, in accordance with NYSE Arca Rule 2.4, to conduct business on the trading facilities of NYSE Arca and to represent such OTP Firm in all matters relating to the Exchange. A Nominee shall agree to be bound by the Bylaws and Rules of NYSE Arca, and by all applicable rules and regulations of the Securities Exchange Commission.

NYSE Arca, Inc. ("NYSE Arca", the "Exchange", or the "Corporation") – a Delaware corporation as described in the Corporation's Certificate of Incorporation and Bylaws. NYSE Arca is a national securities exchange as that term is defined by Section 6 of the Securities Exchange Act of 1934, as amended. NYSE Arca, Inc. is also a Self-Regulatory Organization.

OTP – an Options Trading Permit issued by the Corporation for effecting approved securities transactions on the Corporation's trading facilities. An OTP may be issued to a Sole Proprietor, Partnership, Corporation, LLC or other organization which is a registered Broker or Dealer, pursuant to Section 15 of the Securities Exchange Act of 1934, as amended, and which has been approved by the Corporation.

OTP Firm – a sole proprietor, partnership, corporation, limited liability company or other organization in good standing who holds an OTP or upon whom an individual OTP Holder has conferred trading privileges on the Corporation's trading facilities. An OTP Firm shall agree to be bound by the Certificate of Incorporation, Bylaws and Rules of NYSE Arca, and by all applicable rules and regulations of the Securities and Exchange Commission.

OTP Holder – a natural person who has been issued an OTP, or has been named as a Nominee of an OTP Firm in accordance with NYSE Arca Rules.

Primary Business – refers to greater than 50% of the OTP Holder's business.

Self-Regulatory Organization ("SRO") - each exchange or national securities association is an SRO. Each SRO must have rules that provide for the expulsion, suspension and other discipline of member Broker-Dealers for violation of the SRO's rules

KEY PERSONNEL				
Please identify the key personnel who hold the below positions (or the individual whose responsibilities are the functional equivalent of such position, regardless of actual titles used by the Applicant Firm) and who will want to receive communications pertaining to our options markets.				
Chief Executive Officer ("CEO")				
Name:	CRD:			
Phone:				
Email:				
Chief Financial Officer ("CFO")				
Name:	CRD:			
Phone:				
Email:				
Chief Compliance Officer ("CCO")				
Name:	CRD:			
Phone:				
Email:				
Chief Operations Officer ("COO")				
Name:	CRD:			
Phone:				
Email:				
Head of Options Clearing				
Name:	CRD:			
Phone:				
Email:				
Head of Options Trading				
Name:	CRD:			
Phone:				
Email:				

SECTION	1 1 - ORGANIZATION	IAL PROFILE			
Date:		SEC #:	CRD #:	MPID:	
		Application	Amer	endment	
GENERA	L INFORMATION				
Name of A	applicant Broker-Dealer:				
Business A	Address:				
		City:	State:	: Zip Code:	
Business f	Phone:		Website:		
Contact Na	ame:		Title:		
Phone:			Email:		
TYPE OF	ORGANIZATION				-
	Corporation	Limited Liability Company		artnership	or
TYPE OF	BUSINESS TO BE C	CONDUCTED WITH OPTIONS	TRADING PE	ERMIT (Check all that apply)	
	Lead Market Maker	☐ Remote Market Maker		Floor Market Maker	
	Floor Broker	☐ Clearing Services		Order Sending	
	Agency Trading	☐ Proprietary Trading		Away Market Making	
OTHER E	BUSINESS ACTIVITIE	S CONDUCTED BY APPLICA	NT BROKER	R_DEALER (Check all that apply)	
	Lead Market Maker	☐ Remote Market Maker		Floor Market Maker	
	Floor Broker	☐ Clearing Services		Order Sending	
	Agency Trading	☐ Proprietary Trading		Away Market Making	
OTHER S	SELF-REGULATORY	ORGANIZATION MEMBERSH	IPS (Check a	all that apply)	
	NYSE MKT		☐ Ne	ew York Stock Exchange (NYSE)	
	Chicago Board Options	Exchange (CBOE)	☐ Chi	nicago Stock Exchange (CHX)	
	International Securities	Exchange (ISE)	Bos	oston Stock Exchange (BSE)	
	Financial Industry Regu	latory Authority, Inc. (FINRA)	☐ Na:	asdaq Stock Market (NQX)	
	Philadelphia Stock Exch	nange (PHLX)	☐ BA	ATS (BATS)	
	Investors' Exchange LL				
APPLICA	NT'S DESIGNATED I	EXAMINING AUTHORITY ("DI	EA")		
	NYSE Arca, Inc. (NYSE	E Arca / NYSE Arca Options)	☐ Oth	her	

SECTION 2 - MEMBERSHIP AGREEMENT

Applicant Broker-Dealer agrees to abide by the Bylaws and Rules of NYSE Arca, Inc., as amended from time to time, and all circulars, notices, interpretations, directives or decisions adopted by NYSE Arca, Inc.

Applicant Broker-Dealer authorizes any SRO, commodities exchange, governmental agency or similar entity to furnish to NYSE Arca, upon its request, any information that such person may have concerning the ability, business activities, and reputation of Applicant Broker-Dealer or its associated persons, and releases such person or entity from any and all liability in furnishing such information. Applicant Broker-Dealer authorizes NYSE Arca to make available to any governmental agency, SRO, commodities exchange or similar entity, any information it may have concerning the Applicant Broker-Dealer or its associated persons, and releases NYSE Arca from any and all liability in furnishing such information.

Applicant Broker-Dealer acknowledges its obligation to update any and all information contained in any part of this application, including termination of membership with another SRO, which may cause a change in the Applicant Broker-Dealer's DEA. It is understood that in that event, additional information may be required by NYSE Arca

Applicant Broker-Dealer:	CRD#:
Signature of Authorized Officer, Partner, Managing Member or Sole Proprietor:	Date:
Print Name:	Title:

SECTION 3 – FINANCIAL DISCLOSURE
FINANCIAL STATEMENT
Copies of the required financial items as noted on the checklist including: the four (4) most recent FOCUS Reports ³ , most recent Audited Financial Statements, and examination reports and corresponding responses.
SOURCE OF CAPITAL
Explain the source of Applicant Broker-Dealer's Capital
PROPRIETARY ACCOUNTS OF INTRODUCING BROKER-DEALERS (PAIB)
Do you hold a Proprietary Account as an Introducing Broker-Dealer (PAIB)
*If Yes: An introducing Broker-Dealer must notify its DEA in writing when it has entered into a PAIB Agreement with a clearing Broker-Dealer regarding the net capital treatment of assets held in proprietary accounts. Assets (cash and securities) held in trading accounts without a PAIB Agreement are considered to be non-allowable in the computation of net capital under SEC Rule 15c3-1. If NYSE Arca will be your DEA, please enclose a copy of all PAIB Agreements you have entered into with a clearing broker-dealer.
SUBORDINATED LOANS
Have any subordinated loans been made to Applicant Broker-Dealer? Yes (Explain below) No
FINANCIAL OR CONTROLLING INTERESTS
Does the Applicant Broker-Dealer have a financial or controlling (as defined in Form-BD) interest (through direct or indirect stock or bond ownership, through outstanding loans, or otherwise) in any organization engaged in a securities, financial or related business? Yes (Explain below) No
FINANCIAL ARRANGEMENT
Does the Applicant Broker-Dealer have a financial arrangement with any other Broker-Dealer?
Yes (Explain below) No
Type of Arrangement: Direct Equity Investment Profit Sharing Direct Financing Other
Terms of Arrangement (include the names of all participants in the arrangement, and the nature and terms of the arrangement):
OUTSTANDING DEBT (Check all that apply)
Does the Applicant Broker-Dealer owe money to any of the following?
☐ Any NYSE Arca member or member organization or NYSE Arca OTP Holder
Any other national securities or commodities exchange or national securities association
☐ Any member of any other national securities or commodities exchange or national securities association
Explain to whom the money is owed and the dollar amount. Attach a copy of arrangements made for repayment of this debt and evidence of an agreement of repayment.
□ No, the Applicant Broker-Dealer does not owe money to any of the above referenced persons or entities.

³ Applicant Broker-Dealers that do not have the requested financial information available are required to submit Pro Forma Financial statements for the most recent six (6) months or since inception, whichever is less.

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APPLYING AS:	ALLIED PERSON	APPROVED PERSON	
Name:	Title:		CRD#
Firm Name::	Phone:		
 Email:			
	Designated Supervisor of Authorized Trader	S	
F	Form U4 and fingerprint information ⁶ is curre	ent and accessible for this persor	n on Web CRD™
APPLYING AS:	ALLIED PERSON	APPROVED PERSON	
Name:	Title:		CRD#
	Phone:		
. IIIII (Vaine			
_			
Email:	Designated Supervisor of Authorized Trader		
Email:		s	
Email:	Designated Supervisor of Authorized Trader	s	
Email:	Designated Supervisor of Authorized Trader Form U4 and fingerprint information ⁶ is curre	s ent and accessible for this person	n on Web CRD™
Email:	Designated Supervisor of Authorized Trader Form U4 and fingerprint information ⁶ is curre ALLIED PERSON	s ent and accessible for this person APPROVED PERSON	n on Web CRD™ CRD#
Email: APPLYING AS: Name: Firm Name::	Designated Supervisor of Authorized Trader Form U4 and fingerprint information ⁶ is curre ALLIED PERSON Title:	s ent and accessible for this person APPROVED PERSON	n on Web CRD™ CRD#
Email: APPLYING AS: Name: Firm Name:: Email:	Designated Supervisor of Authorized Trader Form U4 and fingerprint information ⁶ is curre ALLIED PERSON Title:	s ent and accessible for this person APPROVED PERSON	n on Web CRD™ CRD#
Email: APPLYING AS: Name: Firm Name:: Email:	Designated Supervisor of Authorized Trader Form U4 and fingerprint information ⁶ is curre ALLIED PERSON Title: Phone:	s ent and accessible for this person APPROVED PERSON	n on Web CRD™ CRD#
Email: APPLYING AS: Name: Firm Name:: Email:	Designated Supervisor of Authorized Trader Form U4 and fingerprint information ⁶ is curre ALLIED PERSON Title: Phone: Designated Supervisor of Authorized Trader	s ent and accessible for this person APPROVED PERSON	n on Web CRD™ CRD#
Email: APPLYING AS: Name: Firm Name:: Email: APPLYING AS:	Designated Supervisor of Authorized Trader Form U4 and fingerprint information ⁶ is curre ALLIED PERSON Title: Phone: Designated Supervisor of Authorized Trader Form U4 and fingerprint information ⁶ is curre	s ent and accessible for this person APPROVED PERSON s ent and accessible for this person APPROVED PERSON	n on Web CRD™ CRD# n on Web CRD™
Email: APPLYING AS: Name: Firm Name:: Email: APPLYING AS: Name:	Designated Supervisor of Authorized Trader Form U4 and fingerprint information ⁶ is curre ALLIED PERSON Title: Phone: Designated Supervisor of Authorized Trader Form U4 and fingerprint information ⁶ is curre ALLIED PERSON	s ent and accessible for this person APPROVED PERSON s ent and accessible for this person	n on Web CRD™ CRD# n on Web CRD™

SECTION 4 - DIRECT OWNERS / INDIRECT OWNERS / EXECUTIVE OFFICERS

⁴ Pursuant to NYSE Arca Rule 1.1(b), the term "Allied Person" shall refer to an individual, who is: (1) an employee of an OTP Holder who controls such firm, or (2) an employee of an OTP Holder corporation who is a director or a principal executive officer of such corporation, or (3) an employee of an OTP Holder limited liability company who is a manager or a principal executive officer of such limited liability company, or (4) a general partner in an OTP Holder partnership; and who has been approved by the Corporation as an Allied Person.

⁵ Pursuant to NYSE Arca Rule 1.1(c), the term "Approved Person" shall refer to a person who is not an OTP Holder, nor an employee or an Allied Person of an OTP Holder, and who: (1) is a director of an OTP Holder, or (2) controls an OTP Holder, or (3) beneficially owns, directly or indirectly, 5% or more of the outstanding equity securities of an OTP holder, or (4) has contributed 5% or more of the partnership capital; and who has been approved by the Corporation as an Approved Person.

by the Corporation as an Approved Person.

NYSE Arca Rule 11.18(b)(2) refers to the designation of a person with authority to reasonably discharge his/her duties and obligations in connection with supervision and control of the activities of the Associated Persons of the OTP Holder. Pursuant to NYSE Arca Rule 1.1(d), the term "Associated Person" shall refer to a person who is a partner, officer, director, member of a limited liability company, trustee of a business trust, employee of an OTP Holder or any person directly or indirectly controlled by or under common control with an OTP Holder.

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SECT	SECTION 5 – REGISTERED TRADERS			
these F prescri registra fingerp	Rules, Applicants must complete the bed in Rule 2.23. Individual traders ation with the Exchange within any a	e necessary documentation a of the Applicant must succe and all applicable categories s should be submitted by the	ons in accordance with NYSE Arca rules. Pursuant to and submit such documentation in the manner essfully pass any required examination and identify on Form U4. Proof of examination requirements, a Applicant to the Central Registration Depository ("Web t are not limited to, the following:	
	 MM – Market Maker Authorize FB – Floor Broker (Series 57 p 	ed Traders of the Applicant (Series 57 prerequisite)	
Please list all individuals who will conduct trading activity on the Exchange on behalf of the Applicant				
	TERED TRADER INFORMATION			
Name (of Applicant:		CRD:	
Date of	f Birth:			
Phone	: 		Email:	
TYPE (OF BUSINESS ACTIVITY TO BE C	ONDUCTED (Please check	(appropriate box below)	
	Lead Market Maker (LMM)		Remote Market Maker (RMM)	
	Floor Market Maker (FMM)		Floor Broker (FB)	
	Market Maker Authorized Trader (N	MMAT)	Office Nominee (Order Sending & Clearing)	
APPLI	CATION CHECKLIST			
	A Form U-4 and Fingerprint card ha	as been submitted directly to	o WebCRD©	
	Individual has passed or been gran	nted a waiver of the required	examination	
REGIS	TERED TRADER INFORMATION			
Name o	of Applicant:		CRD:	
Date of	Birth:			
Phone:			Email:	
TYPE OF BUSINESS ACTIVITY TO BE CONDUCTED (Please check appropriate box below)				
	Lead Market Maker (LMM)		Remote Market Maker (RMM)	
	Floor Market Maker (FMM)		Floor Broker (FB)	
	Market Maker Authorized Trader (N	vimat)	Office Nominee (Order Sending & Clearing)	
APPLIC	CATION CHECKLIST			
	A Form U-4 and Fingerprint card ha	as been submitted directly to	o WebCRD©	
	Individual has passed or been gran	nted a waiver of the required	examination	

You may submit multiple copies of this page, if needed

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SECTION 6 - STATUTORY DISQUALIFICATION DISCLOSURE

Pursuant to the Securities Exchange Act of 1934, as amended ("the Act"), NYSE Arca, Inc. ("NYSE Arca") may deny (or may condition) trading privileges or may bar a natural person from becoming associated (or may condition an association) with an OTP Holder for the same reasons that the Securities and Exchange Commission may deny or revoke a broker-dealer registration under the Act. The Act provides for Statutory Disqualification if a person has:

- Been expelled, barred or suspended from membership in or being associated with an member of a self regulatory organization;
- · had broker, dealer or similar privileges denied or suspended or caused such denial or suspension of another;
- Violated any provision of the Act; or
- Been convicted of a theft or securities related misdemeanor or any felony within ten (10) years of the date of applying for membership status or becoming an Associated Person.

Check here if you DO NOT have person(s) associated with the Applicant Broker-Dealer who is or may be subject to Statutory Disqualification.

Check here if you DO have person(s) associated with the Applicant Broker-Dealer who is or may be subject to Statutory Disqualification.*

Please identify any such person(s) associated with the Applicant Broker-Dealer who is or may be subject to Statutory Disqualification. Additionally, identify any such person(s) who are associated with the Applicant Broker-Dealer and who have been approved for association or continued association by another SRO due to a Statutory Disqualification.

- * Attach a sheet identifying any such person(s), including the following information:
 - Name and CRD number of the person(s).
 - 2. Copies of documents relating to the Statutory Disqualification.
 - 3. Description of each such person's duties (for non-registered individuals, this should include a statement indicating if the position allows access to books, records, funds or securities).
 - 4. Explanation of action taken or approval given by any other SRO regarding each person.

understand the above and the attack documents) are true and complete to pursuant to this Notice in order to proper NYSE Arca will also perform a comprevoked by NYSE Arca depending of to a disciplinary action if false or mis Broker-Dealer to submit to NYSE Arca	(Applicant Broker-Dealer), I hereby attest and affirm that I have read and hed information, and that the answers and the information provided (including copies of any to the best of my knowledge. I acknowledge that NYSE Arca shall rely on the information provided eliminarily approve or deny Applicant Broker-Dealer's application for trading privileges, but that oblete background check of Applicant Broker-Dealer, and such trading privileges may be immediately on the results of such background check. I understand that Applicant Broker-Dealer will be subject sleading answers are given pursuant to this Notice. I also acknowledge the obligation of Applicant ca any amendment to any document submitted as part of its application, including but not limited to days of such amendment or change.
Signature of Authorized Officer, Partner, Managing Member or Sole Proprietor:	Date:
Print Name:	Title:

SECTION 7 - SUPERVISION		
Each OTP Holder must identify the person(s) that is a member, partner, director, or officer exercising responsibility for supervision of day-to-day compliance and maintenance of the firms written supervisory procedures ("WSPs"). Additionally, applicants subject to Exchange Act Rule 15c3-1 are required to have a designated Series 27 licensed principal, pursuant to NYSE Arca Rule 4.5.		
Name of Person responsible for maintaining WSPs: CRD#:		
Applicant Broker-Dealer's WSPs are enclosed.		
Name of Series 27 licensed principal (if applicable):	CRD#:	

NYSE Arca Rules state:

- (a) Adherence to Law No Options Trading Permit Holder or Associated Person of an Options Trading Permit Holder may engage in conduct in violation of the federal securities laws, the Constitution or the Rules of the Exchange. Every Options Trading Permit Holder must supervise persons associated with the Options Trading Permit Holder as to assure compliance therewith.
- (b) Supervisory System Each Options Trading Permit Holder for whom NYSE Arca is DEA must establish and maintain a system to supervise the activities of its associated persons and the operations of its business. Such system must be reasonably designed to ensure compliance with applicable federal securities laws and regulations and NYSE Arca Rules. Final responsibility for proper supervision will rest with the Options Trading Permit Holder. The Options Trading Permit Holder's supervisory system must provide, at a minimum, for the following:
 - (1) The establishment and maintenance of written procedures as required by paragraph (c) of this Rule.
 - (2) The designation of a person with authority to reasonably discharge his/her duties and obligations in connection with supervision and control of the activities of the associated persons of the Options Trading Permit Holder.
 - (3) The Options Trading Permit Holder must undertake reasonable efforts to determine that all supervisory personnel are qualified by virtue of experience or training to carry out their assigned responsibilities.
 - (4) Each Options Trading Permit Holder must designate and specifically identify to NYSE Arca one or more persons who will be responsible for such supervision.
- (c) Written Procedures Each Options Trading Permit Holder must establish, maintain, and enforce written procedures to supervise the business in which it engages and to supervise the activities of its associated persons that are reasonably designed to ensure compliance with applicable federal securities laws and regulations, and with NYSE Arca Rules.

Pursuant to this rule, WSPs should describe the following:

- Specific identification of the individual(s) responsible for supervision either by name or by title and position.
- The supervisory steps and reviews to be taken by the appropriate supervisor this process should identify any exception reports and/or other documents being reviewed and the substantive area being reviewed (e.g., limit order protection, trade reporting, etc.). If an OTP Holder employs automated systems as part of its supervisory system, those systems should also be generally described.
- The frequency of such reviews this should be more specific than simply providing for "a review" or a "review from time to time." The frequency of reviews should be described (i.e., daily, weekly, monthly, quarterly, or annually).
- How reviews will be documented, for example, initialing order tickets or filling out review logs. The procedures should also provide for the documentation of steps taken as a result of supervisory reviews.

For Market Makers, the WSPs and supervisory systems of firms engaged in market making activities must address, at a minimum, trading practice rules (i.e., passive market making, firm quote rule compliance, limit order protection), trading systems, trade reporting, rules compliance and any other material aspect of the firm's market making business. WSPs should include the following subject areas:

- Size conventions
- Coordination of quotations, trades and trade reports
- Improper collaboration and coordination of Market Maker activities
- Failure to honor quotations
- Harassment
- Late and inaccurate trade reporting

ALL OPTIONS TRADING PERMIT HOLDERS MUST KEEP ABREAST OF CHANGES IN LAWS, RULES AND REGULATIONS, MARKET PRACTICES AND INDICATED PATTERNS OF NON-COMPLIANCE AND MUST MODIFY THEIR SUPERVISORY PROCEDURES AND SYSTEMS AS NECESSARY.

SECTION 8 - CLEARING LETTER OF CONS	
Notice of Consent - To be completed by Cl	earing OTP Holder of Application Broker-Dealer
The undersigned hereby represents the clearing Corporation ("NSCC"), the Options Clearing Corporation ("NSCC")	ng agency named below, a member of the National Securities Clearing orporation ("OCC"), and an approved OTP Holder of NYSE Arca, Inc.
The undersigned Clearing OTP Holder hereby through and carried in all accounts held by the	agrees to accept full financial responsibility for all transactions effected following Applicant Broker-Dealer with the clearing agency:
Applicant Broker-Dealer	CRD# and/or SEC File#
Rules and may be relied upon by NYSE Arca,	ntee, letter of authorization, or notice of consent pursuant to NYSE Arca Inc., the NSCC, the OCC, and their respective members. This Notice of as amended from time to time, and shall remain in effect until revoked
Clearing OTP Holder (Broker-Dealer Name)	-
Clearing OTP Holder (OCC Clearing #)	-
Clearing OTP Holder (NSCC Clearing #)	- -
Signature of Authorized Officer, Partner or Managing Member of Clearing OTP Holder	Signature of Authorized Officer, Partner or Managing Member, or Sole Proprietor of OTP Holder
Print Name / Title	Print Name / Title
Date	Date

NYSE Arca, Inc.

DEA Application Requirements

SECTION 9 - DESIGNATED EXAMINING AUTHORITY (DEA) REQUIREMENTS		
ITSFEA COMPLIANCE ACKNOWLEDGEMENT		
This form should be completed by a Director, Officer, General Partner or Individual Dealer's ITSFEA Compliance Procedures are followed. In the future, this ce NYSE Arca along with the Broker-Dealer's year-end FOCUS Report (Form X-17A)	ertification must be completed and filed with	
Broker-Dealer:		
SEC #		
The undersigned states and certifies as follows:		
It is understood that should any Director, Officer, General Partner or Associated Pers Broker-Dealer acquire material, non-public information concerning a corporation while violation of NYSE Arca Rules and Federal securities laws to misuse such information or any options or other derivative securities based thereon, while such information ren	hose securities are publicly traded, it may be a or trade any securities issued by the corporation,	
It is further understood that should any Director, Officer, General Partner or Associated Person of the Broker-Dealer obtain material, non-public information concerning the market in a security or group of securities, it may be a violation of NYSE Arca Rules and Federal securities laws to make improper use of such information in connection with trading in the security, group of securities or any option or other derivative based thereon.		
It is also understood that it may be a violation of NYSE Arca Rules and Federal securiany non-public, material corporate or market information that may be acquired resecurities.	ities laws to disclose to any other person or entity egarding a publicly traded security or group of	
Additionally, the Broker-Dealer represents that it has established written procedu material non-public information by the Broker-Dealer or by any of the Broker-Dealer's business described Persons, taking into consideration the nature of the Broker-Dealer's business described by the Broker-Dealer or by the Broker-Dealer's business described by the Broker-Dealer or by the Broker-Dealer's business described by the Broker-Dealer or by the Broker-Dealer's business described by the Broker-Dealer or by the Broker-Dealer's business described by the Broker-Dealer or by the Broker-Dealer's business described by the Broke	ealer's Directors, Officers, General Partners or	
The Individual(s) responsible for overseeing and supervising the specific element Compliance procedures has reviewed (or supervised the review of) the Broker-Deale brokerage securities accounts of Directors, Officers, General Partners, and Associate with the specific provisions (including timing and type of review) detailed in and reprocedures.	er's proprietary, error account(s), and any outside ed Persons with the Broker-Dealer, in accordance	
Based upon the assessment of the adequacy of those procedures and of the authority and diligence of the person(s) carrying out those procedures (except as to any securities transactions involving the possible misuse of non-public information which already have been reported to NYSE Arca), there is no reasonable cause to believe that any Director, Officer, General Partner, or Associated Persons of the Broker-Dealer has misused, made improper use of, or disclosed material non-public information, or may otherwise be in violation of NYSE Arca Rule 11.3		
Signature of Authorized Officer, Partner, Managing Member, or Sole Proprietor	Date	
Print Name of Authorized Officer, Partner, Managing Member, or Sole Proprietor	Title	

NYSE Master User Agreement

NYSE USER AGREEMENT				
Several NYSE Entities operate markets for options and equities (each, a "Platform"). This User Agreement is made between the NYSE Entity(ies) indicated for the Platform selected below ("NYSE") and the User, as identified below.				
	Pla	atform:	NYSE Entity(ies)	
		NYSE Arca Equities	NYSE Arca, LLC ¹	•
		New York Stock Exchange	New York Stock Exchange LLC	
		NYSE MKT	NYSE MKT LLC	
		NYSE Amex Options	NYSE Amex Options LLC	
		NYSE Arca Options	NYSE Arca, Inc.	
	No	te: Please provide a signature page for each en	ntity selected.	
User:	ess Addres			CRD #:
		City:	State:	Zip Code:
Conta	ct Name:		Telephone:	
Email:				
	☐ Corpo	oration	☐ Partnership	☐ Sole Proprietor
1. D	efinitions			
(a) "Authori	ized Trader" means a person authorized to submit	orders to the Platform on behalf	of his or her User.
(b) "Conne	ctivity Questionnaire" means the Connectivity Que	stionnaire or successor form that	is located at www.nyse.com.
(c) "Effectiv	ve Date" means the date this User Agreement is sign	gned by the relevant NYSE Entity	/(ies).
(d	(d) "Permit" means a trading permit (e.g., Equity Trading Permit, Options Trading Permit, Amex Trading Permit) or member identification number issued by a NYSE Entity for effecting approved securities transactions on a Platform.			
(e	e) "Permit Holder" means a Sole Proprietorship, Partnership, Corporation, LLC or other organization in good standing that has been issued a Permit in accordance with the Rules.			
(f)	(f) "Information" has the meaning set forth in subsection 6(a).			
(g	"Rules" means, with respect to the relevant NYSE Entity(ies) for each Platform, that NYSE Entity's(ies') operating agreements, certification of incorporations, bylaws, rules, procedures, policies, practices, technical specifications, circulars, notices, interpretations, directives and decisions, each as amended from time to time.			
(h	(h) "Session Request Form" means the NYSE/NYSE MKT and NYSE Arca Session Request form or successor form that is located at https://www.nyse.com/publicdocs/nyse/markets/nyse/Client_Session_Request_Form.pdf or successor location.			
, (i)	"User" r	means the entity, other than NYSE, that has signed	I this User Agreement.	

¹ NYSE Arca operates a Platform of its affiliate, NYSE Arca Equities, Inc., under the oversight of NYSE Arca, Inc., a self-regulatory organization. NYSE Master User Agreement Feb2017

2. Rights and Obligations

- (a) Access. Pursuant to the terms and conditions of this User Agreement, NYSE grants the User a personal, non-exclusive, non-transferable, revocable (at will) right to connect to and access the Platform only in accordance with the then-current Rules and User's obligations under this User Agreement and solely for the purpose of placing orders with the Platform for execution and for receiving information from the Platform about these orders. The User is solely and exclusively responsible for any hardware, software, communication equipment, communication services, information formatting requirements or other items or services necessary for accessing and using the Platform. User must request connection to the Platform in a Connectivity Questionnaire accepted by NYSE and must document all requested connectivity in a Session Request Form.
- (b) Restrictions on Use; Security. User may not sell, lease, furnish or otherwise permit or provide access to the Platform or any information or data made available from the Platform to any other entity or to any individual that is not User's employee, customer or agent; provided User may provide access to information or data made available from the Platform when compelled to disclose pursuant to legal process provided by a court of competent jurisdiction or other governmental entity or regulatory or self-regulatory authority to whose jurisdiction the receiving party is subject. User accepts full responsibility for its employee's, customers' and agent's connection to and use of the Platform and for their compliance with the Rules and the User's obligations under this User Agreement. User shall ensure its employees, customers and agents are made aware (to the extent necessary) of the terms of this User Agreement and that all relevant rights and obligations are reflected in the User's contractual relationships with these third parties (to the extent appropriate). User shall not and shall not allow any other party to alter, decompile or disassemble any code underlying the Platform, attempt to circumvent any security protections for the Platform or interfere with or disrupt the Platform or any servers or networks connected to the Platform. User shall ensure that there is no unauthorized use of or access to the Platform, including unauthorized entry of information into the Platform, or the information and data made available by the Platform. User is responsible for all orders, trades and other messages and instructions entered, transmitted or received under identifiers, passwords and security codes of Authorized Traders, and for the trading and consequences of these orders, trades and other messages and instructions. Unless otherwise expressly authorized in writing, the Rules or as otherwise permitted by law, User, including any service bureau or public extranet, may not redistribute the information and data made available by the Platform.
- (c) <u>Fees</u>. User shall pay when due all amounts payable arising from User's access to the Platform. These amounts include applicable exchange and regulatory fees.
- (d) Order Designation. All orders and any trades resulting from these orders are the responsibility of the Permit Holder from which the orders originated.

3. Compliance

- (a) Compliance with the Rules and Law. User acknowledges that connection to and use of the Platform is governed by the Rules. User represents and warrants that: (i) it will use the Platform only if and when it is authorized to use the Platform pursuant to the Rules and when User is a Permit Holder; (ii) it will comply with the Rules and all applicable laws and regulations, and only connect to and use the Platform in compliance with the Rules and all applicable laws and regulations; (iii) it is and will remain responsible for its connection to and use of the Platform and the connection to and use of the Platform by any of its employees, customers and agents; and (iv) it will familiarize all Authorized Traders with all of User's obligations under this User Agreement and will ensure that they receive appropriate training prior to any use or access to the Platform.
- (b) Monitoring. NYSE may monitor the User's connection to and use of the Platform for compliance with all applicable laws, regulations, the Rules and this User Agreement. User shall monitor its employees, agents and customers for compliance with the Rules, the rules and regulations of any self-regulatory organizations of which User is a member, all other applicable regulations and all applicable federal and state laws.
- (c) Integrity of the Platform. User shall not: (i) alter the information or data supplied to or received from the Platform in violation of the Rules, (ii) materially affect the integrity of the information or data supplied to or received from the Platform, or (iii) supply or render information or data to or from the Platform that is illegal, inaccurate, unfair, uninformative, fictitious, misleading or discriminatory. User shall not permit its employees, agents, or customers to interfere with or adversely affect the Platform or any connection to and use of the Platform by any other authorized individuals or entities.
- (d) Indemnity. User shall indemnify, defend and hold NYSE and its affiliates, officers, directors, employees and agents harmless from and against all claims, demands, losses, costs, expenses, obligations, liabilities, damages, recoveries and deficiencies, including interest, penalties and attorneys' fees, (collectively, "Claims"), arising from or as a result of User's breach of its obligations under this User Agreement, NYSE's use or disclosure of User's Information or information in accordance with Section 6(b) (except when used or disclosed for a non-regulatory purpose) or otherwise from User's connection to and use of the Platform (including connection and use by User's employees, customers and agents), except to the extent the Claims arise from NYSE's gross negligence, willful misconduct, fraud or breach of this User Agreement. NYSE may participate, at its own expense, in any defense and settlement directly or through counsel of their choice and User shall not, without the prior written consent of NYSE, enter into any settlement agreement: 1) on terms that would diminish the rights provided to NYSE or increase the obligations assumed by NYSE under this User Agreement, and 2) which does not include an unconditional release of NYSE by every claimant or plaintiff from all liability in respect to the claim, demand, expense, obligation, liability, damage, recovery or deficiency.

4. Change of the Platform

Nothing in this User Agreement constitutes an obligation by NYSE to continue or support any aspect of the Platform in its current form or previous forms. NYSE may from time to time make additions, deletions or modifications to the Platform. NYSE may temporarily or permanently, unilaterally condition, modify or terminate the right of any individuals or entities to access, receive or use the Platform in accordance with the Rules. Further, NYSE may temporarily or permanently terminate the right of any individuals or entities to access the Platform at any time.

5. Ownership

All patents, copyrights, trade secrets, trademarks and other property rights in or related to the Platform and the information and data made available through the Platform (including compilation rights in information and data) are and will remain the exclusive property of NYSE or its licensors. User shall attribute the source as appropriate under all circumstances. For the avoidance of doubt, User retains ownership of its name, trade name, trademarks and service marks.

6. Information

- (a) Confidentiality. Both parties acknowledge that: (i) the Platform and the information and data made available in the Platform incorporate confidential and proprietary information developed, acquired by or licensed to NYSE, including confidential information of NYSE or other entities, and (ii) each party may receive or have access to other proprietary or confidential information disclosed and marked as confidential by the disclosing party (the confidential and proprietary information in (i) and (ii), collectively, the "Information"). Except as set forth in Section 6(b), the receiving party shall use the disclosing party's Information solely to perform its obligations under this User Agreement. The receiving party shall take all precautions necessary to safeguard the confidentiality of the disclosing party's Information, including: (i) those taken by the receiving party to protect its own confidential information, and (ii) those which the disclosing party may reasonably request from time to time.
- (b) <u>Disclosure</u>. The receiving party shall not disclose, in whole or in part, the disclosing party's Information to any person, except as specifically authorized under this User Agreement. User shall not disclose any data or compilations of data made available to User by the Platform without the express, prior written authorization of NYSE. User consents to NYSE disclosing: (i) Information in accordance with its regulatory obligations, and (ii) to ICE and any affiliates of ICE, subject to the restrictions set forth in this User Agreement. User specifically consents to the disclosure of its Information to the consolidated audit trail pursuant to SEC Rule 613(j)(2) and the Rules.
- (c) <u>Unauthorized Use or Disclosure</u>. The parties acknowledge that any unauthorized use or disclosure of the disclosing party's Information may cause irreparable damage to the disclosing party. If an unauthorized use or disclosure occurs, the receiving party shall immediately notify the disclosing party and take at its expense all steps necessary to recover the disclosing party's Information and to prevent its subsequent unauthorized use or dissemination, including availing itself of actions for seizure and injunctive relieve. If the receiving party fails to take these steps in a timely and adequate manner, the disclosing party may take them at the receiving party's expense, and the receiving party shall cooperate reasonably in the actions that the disclosing party may request.
- (d) <u>Limitation</u>. Unless otherwise required by law, regulation or the Rules, the receiving party has no confidentiality obligation with respect to any portion of the disclosing party's Information that: (i) the receiving party independently developed before receiving the Information from the disclosing party, (ii) the receiving party lawfully obtained from a third party under no obligation of confidentiality, (iii) is or becomes available to the public other than as a result of an act or omission of the receiving party or any of its employees or (iv) the receiving party is compelled to disclose pursuant to legal process provided by a court of competent jurisdiction or other governmental entity or regulatory or self-regulatory authority to whose jurisdiction the receiving party is subject.

7. Disclaimer of Warranty

THE PLATFORM AND ANY CONNECTIVTY TO THE PLATOFRM IS MADE AVAILABLE "AS IS" AND WITHOUT WARRANTY OF ANY KIND. ALL WARRANTIES, CONDITIONS, REPRESENTATIONS, INDEMNITIES AND GUARANTIES WITH RESPECT TO THE PLATFORM, ANY CONNECTIVITY TO THE PLATFORM AND ANY DATA, SOFTWARE OR INFORMATION MADE AVAILABLE IN THE PLATFORM OR THE CONNECTIVITY BY NYSE OR ITS LICENSORS, WHETHER EXPRESS, IMPLIED OR STATUTORY, ARISING BY LAW, CUSTOM, PRIOR ORAL OR WRITTEN STATEMENTS BY NYSE OR ITS AGENTS, AFFILIATES, LICENSORS OR OTHERWISE (INCLUDING ANY WARRANTY OF SATISFACTORY QUALITY, ACCURACY, UNINTERRUPTED USE, TIMELINESS, LATENCY, TRUTHFULNESS, SEQUENCE, COMPLETENESS, MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE, NON-INFRINGEMENT OR THAT THE PLATFORM OR CONNECTIVITY IS FREE OF VIRUSES OR OTHER HARMFUL COMPONENTS AND ANY IMPLIED WARRANTIES ARISING FROM TRADE USAGE, COURSE OF DEALING OR COURSE OF PERFORMANCE) ARE OVERRIDDEN, EXCLUDED AND DISCLAIMED TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW OR RULES.

8. No Liability for Trades

USER UNDERSTANDS THAT: (I) NYSE IS NOT DIRECTLY OR INDIRECTLY A PARTY TO OR A PARTICIPANT IN ANY TRADE OR TRANSACTION ENTERED INTO OR OTHERWISE CONDUCTED THROUGH THE PLATFORM, AND (II) NYSE IS NOT LIABLE IN ANY MANNER TO ANY PERSON (INCLUDING THE USER AND ANY PERSON FOR WHOM THE USER IS AUTHORIZED TO TRADE OR ACT) FOR THE FAILURE OF ANY PERSON ENTERING INTO A TRADE OR TRASACTION BY MEANS OF THE PLATFORM TO PERFORM THIS PERSON'S SETTLEMENT OR OTHER OBLIGATIONS UNDER THE TRADE OR TRANSACTION. NYSE AND ITS AGENTS, AFFILIATES AND LICENSORS ARE NOT LIABLE FOR ANY LOSSES, DAMAGES OR OTHER CLAIMS, ARISING OUT OF THE PLATFORM, ANY CONNECTIVITY TO THE PLATFORM OR THE USE OF THE PLATFORM OR ANY CONNECTIVITY TO THE PLATFORM. USER SHALL ABSORB ANY LOSSES, DAMAGES OR OTHER CLAIMS, RELATED TO A FAILURE OF THE PLATFORM TO DELIVER, DISPLAY, TRANSMIT, EXECUTE, COMPARE, SUBMIT FOR CLEARANCE AND SETTLEMENT, OR OTHERWISE PROCESS AN ORDER, MESSAGE OR OTHER DATA ENTERED INTO, OR CREATED BY, THE PLATFORM EXCEPT AS PROVIDED BY THE RULES OR APPLICABLE LAW. IF THIS SECTION IS DEEMED TO CONFLICT WITH ANY OTHER SECTION OF THIS USER AGREEMENT, THIS SECTION SUPERCEDES THE OTHER SECTION.

9. No Consequential Damages

NYSE AND ITS AGENTS, AFFILIATES AND LICENSORS ARE NOT LIABLE FOR ANY LOSS, DAMAGES, CLAIM OR EXPENSE, INCLUDING ANY DIRECT, CONSEQUENTIAL, INDIRECT, SPECIAL, PUNITIVE OR INCIDENTAL DAMAGES OR LOST PROFITS, WHETHER FORESEEABLE OR UNFORSEEABLE, BASED ON USER'S CLAIMS OR THE CLAIMS OF ITS CUSTOMERS, EMPLOYEES OR AGENTS (INCLUDING CLAIMS FOR LOSS OF DATA, GOODWILL, USE OF MONEY OR CONNECTION TO OR USE OF THE PLATFORM OR ANY CONNECTIVITY TO THE PLATFORM, INTERRUPTION IN USE OR AVAILABILITY OF THE PLATFORM OR ANY CONNECTIVITY TO THE PLATFORM, STOPPAGE OF OTHER WORK OR IMPAIRMENT OF OTHER ASSETS), ARISING OUT OF OR RESULTING FROM BREACH OR FAILURE OF EXPRESS OR IMPLIED WARRANTY, BREACH OF CONTRACT, MISREPRESENTATION, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHER LEGAL OR EQUITABLE THEORY. THIS SECTION DOES NOT APPLY ONLY WHEN AND TO THE EXTENT THAT APPLICABLE LAW OR THE RULES SPECIFICALLY REQUIRES LIABILITY, DESPITE THE FOREGOING EXCLUSION AND LIMITATION.

10. Term and Termination

This User Agreement is effective as of the Effective Date and remains in effect until terminated. NYSE may terminate this User Agreement, one or more Connectivity Questionnaires or one or more Session Request Forms immediately if: (i) User is in breach of this User Agreement for any reason, (ii) any representations made by User in connection with this User Agreement are or become false or misleading, (iii) NYSE determines that it is necessary to protect the Platform from abuse, degradation or material harm, (iv) NYSE determines that continued provision of access will contravene any local, state, federal or international law or regulation or (v) NYSE is notified that User is no longer a Permit Holder in good standing with NYSE or otherwise is no longer authorized to access the Platform. Either party may terminate this User Agreement, a Connectivity Questionnaire or a Session Request Form for convenience upon thirty (30) days' written notice to the other party. If User does not have at least one Connectivity Questionnaire and Session Request Form in effect, then this User Agreement automatically terminates. If this User Agreement terminates, all Connectivity Questionnaires and Session Request Form for any reason, all rights granted to User under this User Agreement, the Connectivity Questionnaire or the Session Request Form, as relevant, cease. The provisions of Sections and subsections 3(d), 5, 6, 7, 8, 9, 10 and 13 survive the termination or expiration of this User Agreement for any reason. Termination of this User Agreement, a Connectivity Questionnaire or a Session Request Form does not relieve User of any obligations incurred through its connection to and use of the Platform.

11. Assignment

User shall not assign, delegate or otherwise transfer this User Agreement, a Connectivity Questionnaire or a Session Request Form or any of its rights or obligations under this User Agreement, a Connectivity Questionnaire or a Session Request Form without NYSE's prior approval. NYSE may assign or transfer this User Agreement, Connectivity Questionnaires and Session Request Forms, or any of its rights or obligations under this User Agreement, Connectivity Questionnaires or Session Request Forms to a related or unrelated party upon notice to User. Any purported assignment or delegation in violation of this Section 11 is null and void.

12. Force Majeure

Without prejudice to any of NYSE's rights under the Rules, neither party is liable nor will be deemed in default for any failure or delay in its performance under this User Agreement (other than User's payment obligations) to the extent due to a cause or causes beyond its control, including acts of God or public enemy, war, terrorist act, insurrection or riot, fire, flood, explosion, earthquake, unusually severe weather, labor dispute, national emergency, or act or omission of any governing authority or agency of a governing authority.

13. Miscellaneous

- (a) Except as set forth in subsections 13(j) and (k), this User Agreement can only be amended by a written instrument signed by both parties. An obligation under this User Agreement can only be waived by a written instrument signed by the party waiving the obligation. The failure of NYSE at any time to enforce any provision of this User Agreement does not affect its right thereafter to require complete performance by User. This User Agreement binds each party's respective successors and permitted assigns. This User Agreement, together with all Connectivity Questionnaires, all Session Request Forms, the Rules, all agreements required by the Rules and all other agreements entered into related to User's access, connection to or use of the Platform constitute the entire agreement between the parties with respect to connection to and use of the Platform. This User Agreement replaces prior user agreements related to User's use of the Platform.
- (b) This User Agreement is governed by and shall be construed under the laws of the State of New York, without regard to choice of law principles.
- (c) The parties shall submit all controversies or claims arising out of or relating to this User Agreement, or to its breach or alleged breach, to arbitration in New York, New York administered by the American Arbitration Association in accordance with its Commercial Arbitration Rules. This requirement for arbitration does not prevent either party in accordance with subsection 6(c) from seeking interim injunctive relief in any court of competent jurisdiction in New York, New York. Judgment on the award rendered by the arbitrator(s) may be rendered by a state or federal court sitting in New York, New York, and each party submits to the personal jurisdiction of these courts for the purpose of entering any such judgment. The parties acknowledge that this User Agreement evidences a transaction involving interstate commerce, and that the United States Arbitration Act governs the interpretation and enforcement of this arbitration clause and any proceedings brought pursuant to it. The arbitrator(s), however, shall have no authority to award punitive or other damages, other than interest and fees as may be permitted by this User Agreement, not measured by the prevailing party's actual damages, and no authority to order the arbitration to proceed on behalf of a class or on behalf of any other person not a signatory to this User Agreement. The arbitrator(s) may grant injunctive and other equitable relief, but in granting any relief of any kind the arbitrator(s) may not modify or disregard the terms of this User Agreement. Neither party may bring an action arising out of this User Agreement or any breach or claimed breach of this User Agreement more than one (1) year after the cause of action arose.
- (d) If any provision of this User Agreement is held to be unenforceable, in whole or in part, that holding will not affect the validity of the other provisions of this User Agreement.
- (e) Headings in this User Agreement are for convenience only and do not form a part of this User Agreement and do not in any way modify, interpret or construe the intentions of the parties.
- (f) Nothing contained in this User Agreement will be construed as creating a partnership, joint venture or other contractual relationship between the parties.
- (g) Except as otherwise provided in this User Agreement, all notices to the parties must be sent by: (i) courier, (ii) certified mail, postage prepaid and return receipt requested, or (iii) e-mail with e-mail acknowledgement of receipt. All notices must be sent to the notice address listed on the last page of this User Agreement. Either party may change its designated notice recipient by notice to the other party.
- (h) Except for NYSE's affiliates, there are no third party beneficiaries to this User Agreement.
- (i) NYSE may, in its sole discretion, immediately amend any provision of this User Agreement, any Connectivity Questionnaire and any Session Request Form by notice to the User, where failure to do so will or would be likely to give rise to a breach of the rules or regulations of an applicable regulatory authority by NYSE. The User expressly agrees that this provision is a condition of this User Agreement and is necessary to ensure that regulatory compliance is maintained by NYSE at all times.

- (j) NYSE may further amend the provisions of this User Agreement, any Connectivity Questionnaire and any Session Request Form by notice to the User. The amendment to this User Agreement contained within this notice will be effective sixty (60) days subsequent to receipt of the notice by the User, unless User terminates this User Agreement, Connectivity Questionnaire or Session Request Form, as relevant, pursuant to this Section 13(k). If the amendment has a material, adverse impact on User, then User may terminate the modified User Agreement, Connectivity Questionnaire or Session Request Form, as relevant, within sixty (60) days of receipt of the notice.
- (k) No remedy conferred by any of the provisions of this User Agreement is intended to be exclusive of any other remedy including any remedy or rights under the Rules, except as expressly provided in this User Agreement, and each and every remedy is cumulative and in addition to every other remedy given under this User Agreement or now or later existing in law or in equity or by statute or otherwise.
- (I) It is not the responsibility of NYSE to inform Users of regulatory requirements including all regulatory, audit trail, record keeping and record retention requirements to which they may be subject (in any jurisdiction). The User assumes all responsibility for keeping itself fully informed of all Rules, rules, requirements, policies and laws.
- (m) Notwithstanding any other provision in this User Agreement, User acknowledges and agrees that confidential information and services (including any software, data or related materials provided by NYSE to User in connection with this User Agreement) may not be disclosed to any person or entity targeted by any of the economic sanctions of the United States administered by the United States Treasury Department's Office of Foreign Assets Control ("OFAC"), or any person in any country targeted by OFAC sanctions, or used, in whole or in part, in any way that reasonably could be expected to cause a violation by NYSE or an affiliate of NYSE of OFAC sanctions or restrictions on the export, re-export, sale or transfer of goods and technology administered by the United States Department of State or United States Department of Commerce.

The parties have executed this User Agreement by their duly authorized representatives.

Accepted on behalf of User:	Accepted on behalf of NYSE:
(Company Name)	Entity:
By (Signature):	By (Signature):
Name:	Name:
Title:	Title:
Date:	Date:
With Notices To:	
User Name:	NYSE
Contact Name:	Attention: Client Relationship Services
Address:	353 N. Clark Street, 31st Floor
City, State, Zip:	Chicago, IL 60654
Email:	crs@nyse.com

Session Request Form Pillar Native Gateway

Session Request Form Pillar Native Gateway					
All firm connections are subject to and governed by applicable SEC rules and regulations, the rules of the Exchange, the NYSE Master User Agreement, the NYSE Service Bureau Connection Agreement, or other NYSE Agreement and the associated fees (https://www.nyse.com/markets/fees). Capitalized terms that are not defined in this Session Request Form have the meanings given them in the Master User Agreement.					
For questions regarding the Completed Session Reque					
Contact Information					
Company Name:					
First/Last Name:					
Email Address:					
Phone:					
Acknowledgment of Certif	ication				
Please check the following to tested and certified with our	oox to acknowledge tha Firm Testing group:	t any new fund	tionality being reques	ted in this document ha	as been appropriately
Session Detail (Please sel	ect only one market, s	ession type,	and protocol, per rec	quest form.)	
Request Type:		☐ Modify	Remov	re	
Market:	☐ NYSE Arca Eq	<u> </u>			
	☐ NYSE MKT ☐ NYSE Amex Options ☐ NYSE Arca Options			SE Arca Options	
Session Type:	☐ Member	Service	Bureau	# of Sessions:	
Protocol:	☐ FIX Order Entry ☐ Binary Order Entry ☐ FIX Drop Copy ☐ Binary Drop Copy				
Sender Comp IDs (If modifying or removing.):					
Order Entry Settings					
- Leave blank and proceed to the next page if protocol is drop copy Check only the settings that are changing if this is a modification.					
MPID(s):					
Cancel on Disconnect:		None	☐ Cancel All	☐ Cancel All Except	On Open/On Close
Default Self-Trade Prevention:		☐ None	☐ Cancel Newest	☐ Cancel Oldest	
		☐ Cancel Bo	oth	☐ Decrement	
Max Order Qty (Exchange max applied, if blank.):					
Priority Update Ack Subscription:		Subscribe		☐ Do Not Subscribe	
Symbol Eligibility:		All Symbo	ols	☐ Test Symbols Onl	у

January 2017

Drop Copy Settings				
 Leave blank if protocol is order entry. Check only the settings that are changing if this is a modification. 				
Filter By (Choose One):	☐ Sender Comp ID ☐ MPID (F	IX Only)		
Based on the above selection, list all items to filter for below. (e.g. – If you selected "MPID", list the MPIDs that should be reported.)				
Message Preference:	☐ All activity (Exchange Side)	☐ Fills/Partial Fills Only		
Source IP Permission				
- List any IPs, or IP ranges, that will be conne	ecting to Pillar Native Gateway.			
By (Signature)				
Name:				
Title:				
Company Name:	-	CRD#		
Phone:				
Email Address:				
Date:				

Completed Session Request Forms should be returned via email to connectivity@nyse.com.

Pillar Service Bureau Connection Agreement

SERVICE BUREAU CONNECTION AGE	REEMENT		
The undersigned ("User"), as a condition and in consideration of being permitted to connect to the Pillar technology platform ("Pillar"), for the purposes of connection to one or more market (as identified below), agrees with NYSE Arca, LLC ("NYSE") as set forth in this Service Bureau Connection Agreement ("Connection Agreement").			
Platform:	NYSE Entity(ies)		
☐ NYSE Arca Equities	NYSE Arca, LLC ¹		
☐ New York Stock Excha	nge New York Stock Exchange LLC		
☐ NYSE MKT	NYSE MKT LLC		
☐ NYSE Amex Options	NYSE Amex Options LLC		
☐ NYSE Arca Options	NYSE Arca, Inc.		
General Information			
Name of Firm or Company ("User"):	(If User changes its name, a new Connection Agreement is required.)		
AKA Name / Formerly Known As:			
Address:			
Contact Person:			
Title:			
Phone:	Fax:		
Email:			
Web Address:			
User represents that it is a service bureau acting on behalf of an approved member/participant/permit holder ("Subscriber") of the market(s) identified above.			
Authorization and Acceptance			
Authorized Signature of User:			
Name:			
Title:			
Date:			

¹ NYSE Arca operates a Platform of its affiliate, NYSE Arca Equities, Inc., under the oversight of NYSE Arca, Inc., a self-regulatory organization.

PILLAR SERVICE BUREAU CONNECTION AGREEMENT AT TERMS AND CONDITIONS

1. Connection

This Connection Agreement provides User only with a connection to Pillar ("Pillar Connection") and does not assure User or any end user receiving connectivity directly or through User ("End User") of the right to access the New York Stock Exchange, NYSE MKT, NYSE Arca Equities, NYSE Arca Options, NYSE Amex Options, or NYSE Bonds marketplaces (each a "NYSE Market" and together "NYSE Markets") and User is responsible for making separate arrangements to access each NYSE Market. In NYSE's sole discretion, the use of or the right to receive or redistribute a Pillar Connection or access to the NYSE Markets (a) may not be made available to all persons or entities, and (b) may require compliance with additional terms, obligations and conditions, including execution of and compliance with additional documentation. User is responsible for all of its and its End Users' costs and charges incurred in connecting to Pillar and for all transactions effected through the use of any password, encryption key or any other security methodology issued to User. User shall ensure that each End User is a Subscribers of any NYSE Market to which User provides the End User a Pillar Connection and shall not allow any End User that is not also a Subscriber of a NYSE Market access to that NYSE Market.

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2. Proprietary Rights

User agrees that all proprietary rights in Pillar and the Pillar Connection are and shall remain the property of NYSE and its third party providers of data, information, data processing services or other services related to the Pillar Connection or any service ("Third Party Providers"), and User shall have no proprietary right or interest in Pillar or the Pillar Connection.

3. Compliance with Law

User shall comply with (i) all applicable laws, regulations, interpretations, decisions, opinions, orders and other requirements of the SEC; (ii) all rules, regulations, interpretations, decisions, opinions, orders and other requirements of any applicable NYSE Markets, relating to Pillar and the Pillar Connection. User shall not (a) alter, decompile, or disassemble any code underlying Pillar or the Pillar Connection or (b) attempt to circumvent any security protections for Pillar or the Pillar Connection, or (c) interfere with or disrupt Pillar or the Pillar Connection, or any servers or networks connected to the NYSE Markets, or (d) give access to or disclose to any unauthorized person any password, encryption key or other security methodology through which Pillar or any Pillar Connection is accessed. User shall take all reasonable precautions to safeguard the confidentiality of any password encryption key or other security methodology.

4. Specifications and Testing

User has read and understands the specifications and policies located at www.nyse.com/connectivity/specs any other specifications and policies applicable to User, the Pillar Connection and the NYSE Markets, all as updated from time to time and located at www.nyse.com (collectively, the "Specifications"). User shall comply with and be bound by all provisions of the Specifications, as currently in effect and, in accordance with Section 6 below, as they may be amended from time to time. User shall cooperate with NYSE and whatever other parties NYSE specifies as required for testing of business continuity and disaster recovery plans, including backup systems.

5. Suspension of Pillar Connection

NYSE may, without incurring any liability, suspend the User's or an End User's Pillar Connection at any time, without notice and without cause.

6. Amendment

NYSE may amend this Connection Agreement and the Specifications from time to time upon giving notice of the terms of any amendment to User by any reasonable means, including by publication on www.nyse.com (the "Website"). With regard to any amendment effected by publication on the Website, NYSE shall use reasonable efforts to advise User of the publication of the amendment by sending notice to the email address of User's Contact Person set forth on the signature page of this Connection Agreement. NYSE, in its sole discretion, may limit, expand or terminate, or subject to different or additional terms, conditions or restrictions, the Pillar Connection. User's use of the Pillar Connection after five (5) days of publication or receipt of notice of amendment of this Connection Agreement or of the Specifications constitutes acceptance of that amendment. If User changes its name, a new Connection Agreement is required. If the Subscriber for a Service Bureau becomes invalid, User shall send NYSE notice of this invalid status within thirty (30) days of the Subscriber becoming invalid, and a new Connection Agreement is required. If the User adds additional Subscribers, User must sign a new Connection Agreement for each new Subscriber. Connection Agreements must be current as determined in NYSE's sole discretion. Connection Agreements that are not current are subject to termination by NYSE.

7. Payment

User shall pay NYSE, LLC for the Pillar Connection by End Users per the charges set forth in the applicable NYSE Market fee schedule available at www.nyse.com ("Fee Schedules"). User shall make payments pursuant to the terms set forth in this Connection Agreement and the Fee Schedules. Payment is due within thirty (30) business days from the invoice date. Charges may be changed by NYSE effective at any time. User may arrange for third party billing, however, User shall be fully responsible for all payments due under this Connection Agreement regardless of designation of a third party payor. User agrees to pay all third party charges, such as sales taxes, which are User's legal responsibility to pay.

PILLAR SERVICE BUREAU CONNECTION AGREEMENT TERMS AND CONDITIONS (CONTINUED)

8. Disclaimer

PILLAR AND THE PILLAR CONNECTION ARE PROVIDED TO USER ON AN "AS IS" BASIS. NYSE, NYSE TECHNOLOGIES CONNECTIVITY, INC., THE THIRD PARTY PROVIDERS AND EACH OF THEIR RESPECTIVE AFFILIATES, OFFICERS, DIRECTORS, EMPLOYEES, AGENTS AND LICENSORS ARE REFERRED TO AS THE "DISSEMINATING PARTIES." WITH RESPECT TO PILLAR AND THE NYSE MARKETS, PILLAR CONNECTION, AND THEIR RESPECTIVE CONTENTS, THE DISSEMINATING PARTIES DO NOT MAKE ANY REPRESENTATIONS AND, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, DISCLAIM ALL EXPRESS, IMPLIED AND STATUTORY WARRANTIES OF ANY KIND TO USER, END USER OR ANY THIRD PARTY. THIS DISCLAIMER INCLUDES REPRESENTATIONS AND WARRANTIES REGARDING ACCURACY, TIMELINESS, COMPLETENESS, SEQUENCING, LATENCY, CURRENTNESS, NON-INFRINGEMENT, MERCHANTABILITY, OR FITNESS FOR ANY PARTICULAR PURPOSE, AND ANY REPRESENTATIONS OR WARRANTIES ARISING FROM USAGE OR CUSTOM OF TRADE OR BY OPERATION OF LAW. THE DISSEMINATING PARTIES ASSUME NO RESPONSIBILITY FOR THE CONSEQUENCES OF ANY ERRORS OR OMISSIONS, DELAYS, INACCURACIES, SYSTEM FAILURES OR ANY OTHER FAILURES OR SHORTCOMINGS IN CONNECTION WITH THE USER'S OR END USER'S RECEIPT AND USE OF PILLAR, THE NYSE MARKETS OR PILLAR CONNECTION, AND DO NOT GUARANTEE THE TIMELINESS, SEQUENCE, ACCURACY OR COMPLETENESS OF ANY INFORMATION OR DATA PROVIDED AS PART OF PILLAR, THE NYSE MARKETS OR PILLARCONNECTION.

9. Limitation of Liability

TO THE EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT ARE THE DISSEMINATING PARTIES LIABLE TO USER, ANY END USER OR ANYONE ELSE FOR:

- A) ANY TYPE OF DAMAGES (SUCH AS DIRECT, CONSEQUENTIAL, SPECIAL, INCIDENTAL, PUNITIVE OR INDIRECT DAMAGES), EVEN IF ADVISED OF THE POSSIBILITY OF THE DAMAGES,
- B) ANY OTHER LOSS OR INJURY, OR
- C) ANY TELECOMMUNICATIONS CHARGES OR OTHER COSTS, INCURRED BY USER IN ACCESSING OR USING PILLAR, THE NYSE MARKETS OR PILLAR CONNECTION.

10. Governing Law

This Connection Agreement is governed by and construed in accordance with the laws of the State of New York, USA, without regard to choice of law principles, as the laws of the State of New York apply to agreements made and performed solely within New York. If a court finds any term or provision of this Connection Agreement to be invalid or unenforceable, that term or provision will be ineffective only to the extent of the finding and the court's jurisdiction, without rendering invalid or unenforceable the remaining terms and provisions of this Connection Agreement in that court's jurisdiction or affecting the validity or enforceability of any of the terms and provisions of this Connection Agreement in any other jurisdiction.

11. Term and Termination

This Connection Agreement is effective only when accepted by NYSE. User will be notified of this acceptance by email at the email address of User's Contact Person set forth on the signature page of this Connection Agreement. The term of this Connection Agreement commences upon valid execution by the User and delivery to and acceptance by NYSE, and continues until the last day of the month which is one month after the month in which this Connection Agreement commences. Thereafter, the term of this Connection Agreement automatically extends for one month terms from month to month, unless terminated in accordance with the terms of this Section 11. This Connection Agreement may be terminated by User upon five (5) days' notice to NYSE, and by NYSE at any time in NYSE's sole discretion. Upon termination, NYSE will terminate the Pillar Connection. The foregoing notwithstanding, the provisions of Sections 2, 3, 4, 7, 8, 9, 10, 11, 12, 13, 14, 15, and 17 survive any expiration or termination of this Connection Agreement.

12. Assignment and Entire Agreement

User may not assign or delegate any of its rights or obligations arising under this Connection Agreement, except with the prior written consent of NYSE, which will not be unreasonably withheld. Any purported assignment or delegation in violation of this Section 12 is null and void. This Connection Agreement and the Fee Schedules, as amended from time to time by NYSE or any of the NYSE Markets, constitute the entire agreement between the parties on this subject matter and supersede all prior agreements, arrangements, representations or promises, whether oral or written.

13. Redistribution and Confidentiality

Except as set forth in this Connection Agreement, User may not redistribute the Pillar Connection and may not disclose the content of the NYSE Markets, Pillar Connection or any Specification, unless otherwise permitted pursuant to a separate written agreement with NYSE or pursuant to a published policy of the NYSE Markets or as otherwise permitted by law. The foregoing is not to be construed to restrict the distribution or disclosure of any proprietary information of User solely because the information may have been transmitted via a Pillar Connection. User may allow End Users access or use of the Pillar Connection if User (i) requires that all End Users enter into a separate agreement with User respecting the delivery of User services, and that, irrespective of the separate agreement, acknowledge that there is no contractual privity between any End Users, on the one hand, and NYSE or any of the NYSE Markets, on the other hand, with respect to Pillar and the Pillar Connection, (ii) ensures all End Users comply with the Specifications and (iii) requires that its agreements with each of its End Users contain terms sufficiently limiting End Users' use of Pillar, the NYSE Markets and Pillar Connection in accordance with the restrictions on use, disclaimers and limitations of liability delineated in this Connection Agreement.

PILLAR SERVICE BUREAU CONNECTION AGREEMENT TERMS AND CONDITIONS (CONTINUED)

14. Benefit of Agreement

The provisions of this Connection Agreement are for the benefit of NYSE, NYSE Technologies Connectivity, Inc. and the Third Party Providers, the NYSE Markets and each of their respective affiliates. Each of NYSE, NYSE Technologies Connectivity, Inc. the Third Party Providers, the NYSE Markets and their respective affiliates has the right to assert and enforce the provisions of this Connection Agreement directly against the User.

15. Notices

Except as otherwise provided in this Connection Agreement, all notices to the parties shall be sent by (i) courier, (ii) certified mail, postage prepaid and return receipt requested or (iii) e-mail with e-mail acknowledgement of receipt. All notices must be sent to (i) in the case of NYSE, crs@nyse.com with a copy to ContractNotices@theice.com and (ii) in the case of User, to the User's Contact Person set forth on the first page of this Connection Agreement. Either party may change its designated notice recipient by notice to the other party.

16. Force Majeure

Notwithstanding any other term or condition of this Connection Agreement, NYSE, NYSE's affiliates, and its third party providers, including, but not limited to, software, hardware, communications and data providers, and User, shall not be obligated to perform or observe their obligations undertaken in this Connection Agreement (except for obligations to make payments hereunder and regulatory obligations) if prevented or hindered from doing so by any circumstances found to be beyond their control and without their gross negligence or willful misconduct. Such causes include, without limitation, acts of God, acts of government in its sovereign or contractual capacity, power shortages or failures, utility or communications failures or delays, labor disputes, strikes, supply shortages, equipment failures, and software malfunctions.

17. Predispute Arbitration

- A) ARBITRATION IS FINAL AND BINDING ON THE PARTIES
- B) THE PARTIES ARE WAIVING THEIR RIGHT TO SEEK REMEDIES IN COURT, INCLUDING THE RIGHT TO JURY TRIAL.
- C) PRE-ARBITRATION DISCOVERY IS GENERALLY MORE LIMITED THAN AND DIFFERENT FROM COURT PROCEEDINGS.
- D) THE ARBITRATORS' AWARD IS NOT REQUIRED TO INCLUDE FACTUAL FINDINGS OR LEGAL REASONING AND ANY PARTY'S RIGHT TO APPEAL OR TO SEEK MODIFICATION OF RULINGS BY THE ARBITRATORS IS STRICTLY LIMITED E) THE PANEL OF ARBITRATORS WILL TYPICALLY INCLUDE A MINORITY OF ARBITRATORS WHO WERE OR ARE AFFILIATED WITH THE SECURITIES INDUSTRY
- F) No person shall bring a putative or certified class action to arbitration, nor seek to enforce any pre-dispute arbitration agreement against any person who has initiated in court a putative class action; or who is a member of a putative class who has not opted out of the class with respect to any claims encompassed by the putative class action until: (i) the class certification is denied; or (ii) the class is decertified; or (iii) the User is excluded from the class by the court. Such forbearance to enforce an agreement to arbitrate shall not constitute a waiver of any rights under this Connection Agreement except to the extent stated herein. All claims, disputes, controversies, and other matters in question between the parties to this Connection Agreement and the parties' employees, and other agents, arising out of, or relating to this Connection Agreement, or to the breach hereof, shall be settled by final binding arbitration. The arbitration proceeding shall be held in the City of New York, State of New York, unless otherwise agreed by the parties. In no event shall such claim, dispute, controversy, or other matter in question be made later than one (1) year after the claim, dispute, controversy or other matter in question is related to the collection of past due payments).

PILLAR Connectivity Questionnaire (CQ)

Instructions and Information

Permit Holders must complete and the Exchange must approve the following questionnaire prior to establishing connectivity to the Exchange. All connections are subject to and governed by applicable laws, regulations and Rules and any applicable user agreement located at www.nyse.com. Capitalized terms that are not defined in this Connectivity Questionnaire have the meanings given them in the NYSE Master User Agreement.

1. Process for adding Connectivity:

3. Permit Holder and Contact Information

- Step 1: Completed Connectivity Questionnaire (CQ) is sent to Client Relationship Services (CRS) at CRS@nyse.com.
- Step 2: When the CQ is approved, CRS permissions the new access type for the next business day and notifies the Permit Holder and the API Technical Support team.
- Step 3: API Technical Support completes any necessary session updates. If a new session is required, please also submit the Session Request Form available at www.nyse.com/pillar.
- Step 4: Permit Holder's new access to the Exchange is complete.
- If a connection is terminated by the Permit Holder, the Permit Holder must notify CRS@nyse.com within one business day.
- 2. The full text of rules referenced in this Connectivity Questionnaire can be found at www.nyse.com/regulation.

Permit Holder Firm Name:		Web CRD™ Number:	
Business Contact:		Business Contact E-Mail:	
Compliance Contact:		Compliance Contact E-Mail:	
4. Details			
MPID requesting access to:		MPID:	
☐ NYSE Arca Equition	es NYSE Arca Options		
☐ NYSE MKT Equition	es NYSE Amex Options		
☐ NYSE Equities			
Will this MPID be accessing the exchange via a direct session or through a NYSE Service Bureau*?		☐ Direct (FIX) ☐ Direct (Binary)	•
*Service Bureau must sign in	n Section 5	Service Bureau (SB Name:	
Will this MPID be used by a cull Holder?	istomer or affiliate of the Permit	Yes	□No
If Yes, please lis	st the customer or affiliate name:		
management systems connection. The Permit Holder conflow pursuant to SEC The Permit Holder under und	presents that it has established e s pursuant to applicable Rules an onfirms having established reasor c Rule 15c3-5.	nd federal rules over the order mably designed regulatory poli to be used for any other purpos	d procedures and pre-trade risk flow that is sent through this icies and procedures to monitor order se or for any other entity other than
Name and Title (Printed)			
Name (Signature)			
Places return to Client Polatic	anabin Candings via amail at CDC	@nuga aam	

Please return to Client Relationship Services via email at <u>CRS@nyse.com</u>

PILLAR Connectivity Questionnaire (CQ)

5. Service Bureau Authorization				
Permit Holder Firm Name:	MPID:			
The undersigned, as an approved NYSE Service Bureau, agrees to provide access to the NYSE Platform for the above mentioned Permit Holder per the information outlined in this Connectivity Questionnaire and in accordance with the NYSE Service Bureau Connection Agreement, or other applicable NYSE Agreement.				
Service Bureau Company Name:				
Authorized Signature:				
Name and Title:				
Phone:				
E-Mail:				

Please return to Client Relationship Services via email at CRS@nyse.com.

Floor Broker Letter of Authorization Revocation

То:	NYSE Arca Client Relationship Services Departmen	nt
From:	OTP Clearing Member	
Effective Date:		(Close of Business)
	e informed that the Letter of Authorization issued for the oked effective on the above date.	following Floor Broker has
OTP Firm	Name	
Floor Bro	ker Name	Symbol
Authorize	d Signature – Clearing Member	
Printed N	ame	Title

Market Maker Letter of Guarantee Revocation

То:	NYSE Arca Client Relation	onship Services Department
From:		
	Clearing Member	
Effective Date:		(Close of Business)
Please be revoked ef	informed that the Letter of G fective on the above date:	uarantee issued for the following Market Maker has been
Firm Name	•	
Market Ma	ker Name	
Market Ma	ker Symbol	
Authorized Clearing F		Date
Print Name)	Title

TERMINATION OF ORDER SENDING & CLEARING FIRM

То:	NYSE Arca Client Relationship Services Depa	rtment
From:	OTP Member Firm	
Re:		
	OTPID	Acronym(s)
Type of (OTP:	
☐ Cleari	ng Firm	
Date of T	ermination:	(Close of Business)
☐ Temp	orary Termination (1-120 days)	
	- Date of Return:	
☐ Perm	anent Termination	
	Authorized Signature of OTP Firm	Date

Checklist for Terminating an OTP Order Sending & Clearing Firm

- 1. OTP holders must notify the Exchange no later than one (1) business day in advance of the proposed termination date.
- 2. Temporary terminations cannot exceed 180 days.

NYSE Arca Options

TERMINATION OF MARKET MAKER

To:	NYSE Arca Options Client Relationship	o Services Department	
From	· · · · · · · · · · · · · · · · · · ·		
	Clearing Member		
Date	of termination:	(Close of Business)	
	Temporary Termination (1 to 120 days) *		
	Date of Return:		
	Permanent Termination**		
Mark	et Maker:	Acronym(s):	
OTP	Firm:		
(as de	Clearing Member will continue to accept full final efined in NYSE Arca Rule 6.36) made in the acceptations in the account have been liquidated by the Exchange.	count of the above-specified Market Make	er, until such time
			-
Autho	orized Signature of Clearing Member	Date	
Print	Name	Title	-

Trade activity in a market maker account that is subject to a Temporary Termination must be limited to "closing only" transactions. Closing only shall generally mean submission of orders for the purpose of closing positions or reducing risk. Trade activity in terminated accounts may be subject to regulatory review.

^{*} OTP holders(OTP) must notify the Exchange no later than one (1) business day in advance of the proposed temporary termination date. A temporary termination cannot exceed 180 days.

^{**} A Letter of Guarantee Revocation is required to be filed with the NYSE Arca Client Relationship Services Department after all accounts have cleared.

NYSE Arca Options Floor Broker Letter of Authorization For FLEX Equity Options

This Letter of Authorization is made as of	, 20			
by	"Clearing Member"			
In respect of	"Floor Broker"			
	Holder of NYSE Arca ("Exchange"), and Clearing Member is an fithe Options Clearing ("Clearing Corporation"); and			
——————————————————————————————————————	ed with the Exchange as a Floor Broker pursuant to NYSE Arca ions transactions effected by it on the Exchange be cleared through er, and			
WHEREAS Floor Broker has reques Broker;	sted Clearing Member to issue a Letter of Authorization for Floor			
NOW, THEREFORE, in consideration of the premises and the agreements hereinafter set forth, and in order to induce the Exchange to approve Clearing Member's issuance of a Letter of Authorization to Floor roker, the Clearing Member hereby agrees, for the benefit of Clearing Corporation and the Exchange, and heir respective members, that Clearing Member shall accept full financial responsibility for the clearance of the exchange options transactions in FLEX Equity Options (as defined in NYSE Arca Rule 6.1(b)(6) and 5.32) hade by Floor Broker when the name of Clearing Member is given up.				
the Exchange and has been posted on the b written notice has not been posted for a leas day on the options floor of the Exchange, su	ain in effect until a written notice or revocation has been filed with culletin board of the Options Trading Floor of the Exchange. If such st one hour prior to the opening of trading on a particular business ch revocation shall not become effective until the close of trading Clearing Member of responsibility for transactions guaranteed prior			
may not be revoked or terminated except as	of Authorization shall be filed with the Exchange. This agreement stated above, and this agreement shall not be modified or heretofore or hereinafter executed) unless the approval of the			
WITNESS the due execution of the L	etter of Authorization as of the day first above written.			
Print name of Floor Broker	Print name of Clearing Member			
Authorized Signature of Floor Broker	Authorized Signature of Clearing Member			
Symbol	Title			

NYSE Arca Options Floor Broker's Letter of Authorization

This Letter of Authorization is made as of	, 20 by	
the "Clearing Member" in r	espect of the "OI	ГР
Firm" on behalf of the "Flo		
WHEREAS Floor Broker is an OTP Holder Firm;	of NYSE Arca ("Exchange") and nominee of an O	ТР
WHEREAS Clearing Member is an OTP Fire Corporation ("OCC");	n of the Exchange and member of Options Clear	ng
WHEREAS Floor Broker is registered with t Arca Rule 6.44, and Floor Broker desires that option cleared through the OCC by Clearing Member; and	ne Exchange as a Floor Broker pursuant to NYSI s transactions effected by it on the Exchange be	Ξ
WHEREAS OTP Firm has requested Cleari Broker.	ng Member to issue a Letter of Authorization for I	Flooi
NOW, THEREFORE, in consideration of the the Clearing Member hereby agrees, for the benefit members, that Clearing Member shall accept full final Member is given up:		th,
 □ For the clearance of all Exchange options transact □ For the clearance of all Flex Options transact 		
*Check all that apply.		
This Letter of Authorization shall remain in e with the Exchange. If such written notice has not be trading on a particular business day on the options fl become effective until the close of trading on such diresponsibility for transactions guaranteed prior to the	oor of the Exchange, such revocation shall not by. A revocation shall not relieve Clearing Memb	g of
Executed counterparts of this Letter of Authoragreement may not be revoked or terminated except modified or amended by any other instrument (wheth approval of the Exchange is noted thereon.		
WITNESS the due execution of the Letter of	Authorization as of the day and year above writte	∍n.
Print Name of Authorized Signatory of Floor Broker's OTP Firm	Print Name of Clearing Member	_
Signature of Authorized Signatory of Floor Broker's OTP Firm	Print Name of Authorized Signatory of Clearing Member	_
•	Signature of Authorized Signatory of Clear Member	ing

NYSE Arca Options

MARKET MAKER LETTER OF GUARANTEE

Pursuant to NYSE Arca Rule 6 and 5.32

Dear Market Maker:

You have represented to the undersigned Clearing Member, a member of the Options Clearing Corporation, that you are a registered market maker pursuant to Rule 6.33 of the Rules of NYSE Arca. You have requested the undersigned Clearing Member to issue a Letter of Guarantee for you in order to enable you to meet the requirements of NYSE Arca Rule 6.36. In response to your request, the undersigned Clearing Member hereby agrees to accept full financial responsibility: ☐ For all Exchange options transactions [as defined in NYSE Arca Rule 6.1(a)(6)] made by ☐ For all Flex Options transactions [as defined in NYSE Arca Rule 5.32] made by you* *Check all that apply. This letter shall be deemed to be a Letter of Guarantee pursuant to NYSE Arca Rule 6.36 and may be relied upon by the NYSE Arca, the Options Clearing Corporation and their respective members. This Letter of Guarantee shall be subject to the NYSE Arca Rules as amended from time to time, and shall remain in effect until revoked in accordance with the NYSE Arca. Accepted and agreed to this _____ day of _____, 20 ____. Clearing Firm Name OTP Firm Name Clearing Member Representative (Please Print) Market Maker (Please Print) Authorized Signature of Clearing Member Authorized Signature of Market Maker Symbol of Market Maker

Clearing member authorization for electronic collection of NYSE Arca invoices for the above symbol:

Name on OCC Account			_	
		-		

OCC Account Number____

NYSE Arca Options

FLOOR EMPLOYEE REGISTRATION REQUEST					
Incomplete applications will not be accepted. Applications will not be approved without proper identification, fingerprint clearance, U-4 and CRD registration. Accordingly, failure to respond accurately to the following questions will delay approval of your floor access application and may result in denial of floor access.					
GENERAL INFORMATION					
Name of Applicant:	Applicant CRD#:				
Member Firm:	Member Firm CRD#:				
Business Address:					
City: State: Member Firm Contact:	Zip: Title:				
Phone:	Email:				
APPLICANT PERSONAL INFORMATION					
Home Address:					
City: State: Member Firm	Zip:				
Contact:	Title:				
Phone:	Email:				
TYPE OF BUSINESS TO BE CONDUCTED					
Trade Support Clerk Floor Employee					
All individuals requesting access to the NYSE Arca Options Floor must registe	r as ("FE") on WebCRD				
APPLICATION CHECKLIST					
A Form U-4 requesting ("FE") registration has been submitted to FINI	RA through WebCRD				
A Fingerprint Card has been submitted to FINRA					
APPLICANT ACKNOWLEDGEMENT					
I authorize NYSE Arca, Inc. and its affiliates to give any information they may employer, any federal, state, or municipal agency, or any other SRO, and I relion their behalf from any and all liability of whatever nature by reason of furnish	ease NYSE Arca, Inc., its affiliates and any person acting				
I swear or affirm that I have read and understand the items and instructions or the best of my knowledge.	this form and that my answers are true and complete to				
Signature of Applicant: Date:					
OTP FIRM ACKNOWLEDGEMENT					
I hereby certify that Is authorized to (Name of Applicant)	enter into the NYSE Arca Options trading floor as				
referenced above, on behalf of this OTP Firm (Name of OTP Firm)	·				
Start Date:					
Authorized Signature: Date:					

OTP Request Form

This form should be used to request an Options Trading Permit ("OTP") and to assign that OTP to a nominee of an OTP Firm. This form designates an OTP Firm's nominee as an OTP Holder on behalf of that firm, and must be executed prior to the commencement of trading of that nominee. This form must be approved by NYSE Arca's Client Relationship Services Department. A separate form must be executed for each OTP Holder.

(name of OTP Firm)	("OTP Firm")
Options Trading Permit(s), effective _ (number of OTPs being requested)	(open of business).
(This)/(these) OTP(s) will be held in the name of	of
("OTP Hole (name of nominee)	der"), hereby established as an OTP Holder, until further notice.
☐ (This is a) / (these are) new or additional OTP☐ (This is an) / (these are) existing OTP(s) of the referenced OTP Holder.	P(s) of the OTP Firm e OTP Firm; this form is being executed to assign said OTP(s) to the above
Type of Business activity to be conducted with	h this/these OTP(s):
Lead Market Maker (LMM)	Remote Market Maker (RMM) Floor Market Maker (FMM)
Clearing Services	Order Sending
Floor Broker (FB) - If Floor Broker (FB) is	s checked, do you require a LiquidPoint Login? Yes No
transactions effected on NYSE Arca, all obligation	able for all Exchange obligations, including all obligations arising in connection with ns owed to NYSE Arca or any subsidiary of NYSE Arca, the payment of all NYSE Arca the course of the OTP Firm's and the OTP Holder's NYSE Arca business.
The OTP issued pursuant to NYSE Arca's acceptatermination provisions delineated in NYSE Arca R	cance of this form will be associated with the OTP Firm until terminated pursuant to the Rule 2.22(a).
Signature of OTP Holder:	
Telephone Number of OTP Holder:	Email Address:
Authorized Signature for OTP Firm:	
Print Name of Authorized Signatory:	
Telephone Number of Authorized Signatory:	Email Address:
Date:	
Clearing member authorization for electronic colle	ection of NYSE Arca invoices for this OTP:
Name of Clearing Firm	
OCC Account Number	

NYSE Arca Options

Registered Trader & Nominee Application

REGISTERED TRADERS Each Applicant is required to register employees, nominees and associated persons in accordance with NYSE Arca rules. Pursuant to these Rules, Applicants must complete the necessary documentation and submit such documentation in the manner prescribed in Rule 2.23. Individual traders of the Applicant must successfully pass any required examination and identify registration with the Exchange within any and all applicable categories on Form U4. Proof of examination requirements, fingerprint card submission, and Form U-4s should be submitted by the Applicant to the Central Registration Depository ("Web CRD®") for review by NYSE Arca. Registration categories include, but are not limited to, the following: MM - Market Maker Authorized Traders of the Applicant (Series 57 prerequisite) FB - Floor Broker (Series 57 prerequisite) APPLICANT FIRM INFORMATION Firm Name: CRD: Type of Business: Contact Name: Title: Phone: Email: REGISTERED TRADER / NOMINEE INFORMATION Name of Applicant: CRD: Date of Birth: Phone: Email: TYPE OF BUSINESS ACTIVITY TO BE CONDUCTED (Please check appropriate box below) ☐ Lead Market Maker (LMM) Remote Market Maker (RMM) ☐ Floor Market Maker (FMM) Floor Broker (FB) ☐ Office Nominee **APPLICATION CHECKLIST** A Form U-4 and Fingerprint card has been submitted directly to WebCRD© Individual has passed or been granted a waiver of the required examination **AUTHORIZED ACKNOWLEDGEMENT OF APPLICANT FIRM** Signature of Authorized Officer, Partner, Managing Date Member **Print Name** Title APPLICANT AGREEMENT The undersigned applicant represents that the information and statements contained herein, including the attachments hereto, and other information filed herewith, all of which are parts hereof, are current, true and complete Signature of Applicant CRD# **Print Name** Title

Revised January 2016 1 of 1

AP Form

NYSE Arca, Inc.

This Form is to be completed by persons required to be Approved Persons with the Exchange and for whom the required disclosure information is not available on Web CRD®.

Instructions

Prior to completing this form, the persons seeking Approved Person status ("Applicant") should be familiar with the NYSE Arca, Inc. and NYSE Arca Equities, Inc. (collectively, the "Exchange") Rules, particularly those relating to "Approved Persons," including but not limited to Arca Rule 1.1(c), 2.4, and 2.14, and Arca Equities Rule 1.1(d), 2.3, and 2.13.

- A copy of the completed Form must be retained by the Applicant and the member organization with which the Applicant is or will be associated ("Member Organization").
- To the extent necessary, provide additional information via a separate attachment referencing the section and question to which the additional information applies.
- The list of Approved Persons must be kept up-to-date with the Exchange and FINRA.
 - o A new AP Form should be completed upon the occurrence of a change (e.g., a change in ownership, a new Approved Person)
 - The elimination of an existing Approved Person should be provided to the Exchange and FINRA in writing (email is acceptable)
 - Notification of changes should be provided to the Exchange (<u>crs@nyse.com</u>) and FINRA (<u>Q&RNY@finra.org</u>) within 30 days

For Applicants associated with firms <u>seeking</u> NYSE Arca membership, please email a signed and completed copy of the AP Form to Client Relationship Services at <u>crs@nyse.com</u>.

Section	n I	
1.	Full Name of the Applicant:	-
2.	Full name and Web CRD # of the Member Organization with which the Applicant is or will be associated:	
	Member Organization:	-
	Web CRD#:	-
3.	Approved Person Status is requested pursuant to the rules of the Exchange because the Applicant is not Holder, nor an employee or an Allied Person of a ETP/OTP Firm, and who:	an ETP/OTP
	is a director of an ETP/OTP Firm	
	controls an ETP/OTP Firm	
	beneficially owns, directly or indirectly, 5% or more of the outstanding equity securities of an ETP/0	OTP Firm
	has contributed 5% or more of the partnership capital	
4.	Is the applicant subject to a Statutory Disqualification – as the term is defined in Section 3(a)(39) of the S Act of 1934?	ecurities Exchange
	☐ Yes	
	□ No '	
	If an Applicant or any person associated with the Applicant, subsequently become subject to a <i>Statutory I</i> after initial approval, this information must promptly be communicated to the Exchange by sending notific Q&RNY@finra.org .	•

AP Form - June 2015

Sec	ction II
1.	Address of Applicant's principal place of business (complete address of actual location):
2.	Date and place of incorporation or jurisdiction under the laws of which Applicant was formed:
3.	Indicate whether the Applicant has operated under any other names and identify all such names:
Sec	ction III
	signing below, the Applicant represents and acknowledges the following:
The agr	Applicant is not relying upon the Exchange to provide any information concerning or relating to the Member Organization and ees that the Exchange has no responsibility to disclose to the Applicant any information concerning or relating to the Member anization that it may have now or obtain at any future time. The Applicant agrees for itself, its personal representatives, successors assigns that neither the Exchange, nor any investor, officer, trustee, agent, nor employee of said Exchange shall be liable to the olicant with respect to the Applicant's investment or interest in the Member Organization or with respect to any repayment of any such estment or interest.
inve	understood that the statements made in connection with this Form will be relied upon by the Exchange and may be verified by estigation. The Applicant declares that all such statements are true, complete, current and accurate. It is also recognized that the change reserves the right to request additional information.
	Applicant undertakes and agrees to subject itself to the jurisdiction of the Exchange and to abide by such provisions of the Rules of Exchange as would at any time apply to an "Approved Person" as such term is defined in Arca Rule 1.1(c) and Arca Equities Rule (d).
dea exis am des	Applicant hereby agrees to comply with the relevant provisions of the Securities Exchange Act of 1934, as amended, and the Rules I Regulations thereunder, and to furnish said Exchange with such information with respect to the Applicant's relationship and slings with its affiliated member organization as the Exchange may require, to supply the Exchange with information relating to the stence of any "statutory disqualification" (as such term is defined in Section 3(a)(39) of the Securities Exchange Act of 1934, as ended) to which the Applicant or any person associated therewith may be subject, to permit examination by the Exchange or its signee of Applicant's books and records in order to verify the accuracy of the aforesaid information, and to subject itself to and abide the Exchange' disciplinary authority.
ass	plicant represents that except as is specifically indicated on this form or any supplement thereto, neither it nor any person cociated therewith is subject to a statutory disqualification. (See Section 3(a)(39) of the Securities Exchange Act of 1934, as ended).
full	olicant covenants and agrees that the foregoing statements, warranties, representations and undertakings will continue to apply with force and effect notwithstanding that the Member Organization may have changed its name or form of organization, or legal status that the Member Dealer number) unless Applicant shall have otherwise notified the Exchange, in writing.
Sia	nature: Date:
3	(A Duly Authorized Executive Officer, Senior Partner, Managing Member or equivalent of the Applicant)
Prir	nted Name:
Title	9:

NYSE Arca Options

Lead Market Maker Application

EXPLANATION OF TERMS

For purposes of this application, the following terms shall have the following meanings:

Applicant – the Broker-Dealer applying as a registered Lead Market Maker or amending this form to become a registered Lead Market Maker.

Appointment - on a form or forms prescribed by the Exchange, a registered Market Maker must apply for a Primary Appointment, having the obligations hereunder, and of Rule 6.37, in one or more option classes.

Associated Person - a person who is a partner, officer, director, member of a LLC, trustee of a Business Trust, or employee of an OTP Firm or any person directly or indirectly controlling, controlled by or under common control with an OTP Firm.

Control – as defined on Form-BD, the power, directly or indirectly, to direct the management or policies of a company, whether through ownership of securities, by contract or otherwise. Any person that (1) is a director, general partner or officer exercising executive responsibility (or having similar status or functions); (2) directly or indirectly has the right to vote 25% or more of a class of a voting security or has the power to sell or direct the sale of 25% or more of a class of voting securities; or (3) in the case of a partnership, has the right to receive upon dissolution, or has contributed, 25% or more of the capital, is presumed to control that company.

Central Registration Depository System ("Web CRD®") – a centralized electronic registration system maintained by FINRA which provides information on registered representatives and principals for members of participant organizations. This database contains employment history, exam scores, licensing information, disciplinary actions, fingerprint results, and other related registration information. NYSE Arca, Inc. is a participant of this system.

Designated Examining Authority ("DEA") – the SEC will designate one Self-Regulatory Organization ("SRO") to be a Broker-Dealer's examining authority, when the Broker-Dealer is a Member or OTP Firm of more than one SRO. Every Broker-Dealer is assigned a DEA, who will examine the Broker-Dealer for compliance with financial responsibility rules. The SEC will make the DEA assignment based on the SRO examination program and the Broker-Dealer's primary business location.

Direct Owners/Executive Officers – refers to (1) a director, general partner or officer exercising executive responsibility (or having similar status or function); or (2) directly or indirectly has the right to vote 5% or more of a class of voting security or has the power to sell or direct the sale of 5% or more of a class of voting securities; (3) is entitled to receive 5% or more of the net profits; (4) in the case of a partnership, all general partners and those limited and special partners that have the right to receive upon dissolution or have contributed, 5% or more of the capital; or (5) in the case of a LLC, those members that have the right to receive upon dissolution, or have contributed, 5% or more of the LLC's capital, and if managed by elected managers, all elected managers.

Eligible Issues - an LMM may be allocated any one or more of the options issues opened for trading at the Exchange.

Financial Arrangement – (1) the direct financing of an OTP Holder's dealings upon the Exchange; (2) any direct equity investment or profit sharing arrangement; or (3) any consideration over the amount of \$5,000.00 including, but not limited to, gifts, loans, annual salaries or bonuses.

Lead Market Maker ("LMM") – an individual or entity that has been deemed qualified by the Exchange for the purpose of making transactions on the Exchange in accordance with the provisions of Rule 6.82. Each LMM or nominee thereof must be registered with the Exchange as a Market Maker. Any OTP Holder or OTP Firm registered as a Market Maker with the Exchange is eligible to be qualified as an LMM.

Lead Market Maker OTP - an approved Lead Market Maker with NYSE Arca, Inc. eligible to act as an LMM in options classes.

Market Maker ("MM") – an OTP Holder approved by the Corporation to act as a Market Maker pursuant to NYSE Arca Rule 6.

Market Maker Authorized Trader ("MMAT") – an authorized individual who performs market-making activities pursuant to NYSE Arca Rule 6, on behalf of a OTP Firm or OTP Holder registered as a Market Maker or Lead Market Maker.

NYSE Arca, Inc. ("NYSE Arca", the "Corporation", or the "Exchange") – a Delaware corporation as described in the Corporation's Certificate of Incorporation and Bylaws. NYSE Arca is a national securities exchange as that term is defined by Section 6 of the Securities Exchange Act of 1934, as amended.

Quotations – OTP Holders who are registered as Lead Market Makers are required by rules 6.37 and 6.82 to generate and automatically update two-sided market quotations throughout the trading day in each of their appointed series for 90% of the time the Exchange is open for trading in each series.

Self-Regulatory Organization ("SRO") - each national securities exchange or national securities association is an SRO. Each SRO must have rules that provide for the expulsion, suspension and other discipline of member Broker-Dealers for conduct inconsistent with just and equitable principles of trade.

APPLICATION PROCESS

Filing Requirements:

Prior to submitting the Application to become a Lead Market Maker, an applicant Broker-Dealer must have completed the Options Trading Permit ("OTP") application, identifying "Market Making" as a business to be conducted on NYSE Arca, Inc. A firm will not be eligible for approval as a Lead Market Maker until after their OTP application, with this indication, is approved.

Checklist

Applicant OTP must complete and submit all materials as required in the Application Checklist (page 3) to crs@nyse.com.

If you have questions regarding the application, you may direct them to Client Relationship Services: Email: crs@nyse.com; Phone: 212-896-2830, Option 5.

Application Process:

- Following submission of the <u>Lead Market Maker Application</u>, and supporting documents, NYSE Arca will review the application for completeness prior to submission to FINRA for review.
- If review of Statutory Disqualification Disclosure information and/or a background investigation indicates that the applicant Broker-Dealer has an associated person(s) with a possible statutory disqualification, NYSE Arca or FINRA on behalf of NYSE Arca, will contact the representative of the applicant Broker-Dealer to discuss the statutory disqualification process.
- If it appears that the Applicant has outstanding debt, civil judgment actions and/or regulatory disciplinary actions, the applicant Broker-Dealer will be contacted by NYSE Arca or FINRA on behalf of NYSE Arca for further information.
- NYSE Arca will notify the Applicant in writing of their decision.
- In the event an applicant Broker-Dealer is disapproved by NYSE Arca, the applicant Broker-Dealer has an opportunity to be heard upon the specific grounds for the disapproval, in accordance with the provisions of NYSE Arca Rule 10.14. A disapproved applicant desiring an opportunity to be heard shall file a written application with the Secretary of the Corporation within thirty (30) calendar days after such action has been taken.

APPLICATION CHECKLIST

CHECKLIST FOR BROKER-DEALERS TO BECOME A LEAD MARKET MAKER

- Approved Options Trading Permit (OTP) Application.
- Application for Lead Market Maker, All Sections.
- Copy of the Applicant's Written Supervisory Procedures ("WSPs") for Market Making on NYSE Arca, Inc.
- Financial Documentation
 - Four (4) Most Recent FOCUS Reports and the Most Recent Audited Financial Statements, if applicable
 - Most Recent Balance Sheet and Capital Computation
 - Six Month Profit/Loss Projection
 - Subordination Agreements, if applicable²
- Organization Documents: Articles of Incorporation and Bylaws; Partnership Agreement; Limited Liability Company ("LLC") Agreements; Operating Agreement; or similar documentation
- All examination reports and corresponding responses from the Applicant Broker-Dealer for the previous two (2) years.

Applicants must demonstrate that they have current net capital of 140% of their minimum net capital requirement or \$20,000 in excess of their minimum dollar net capital requirement, whichever is greater. If the Broker-Dealer has reported net losses for the period reviewed, the Firm's financial statements must demonstrate that its excess net capital can withstand six (6) consecutive months of average losses. Applicant Broker-Dealers that do not have the requested financial information available are required to submit Pro Forma Financial statements for the most recent six (6) months or since inception, whichever is less. ² Required for NYSE Arca-DEA Broker-Dealers only

SECTION 1 – ORGANIZATIONAL PROFILE				
Date:	SEC #:	CRD#	:	
	☐ Applicat	ion	mendment	
GENERAL INFORMATION				
Name of Applicant Broker-Dealer:				
Business Address:				
	City:	St	ate: Zip Code:	
Business Phone:		Fax	:	
Contact Name:		Title	:	
Phone:			:	
OTP APPROVAL STATUS				
			nit Holder and Market Maker with NYSE Arca. * and Market Makers with NYSE Arca.	
Amount:	As Of Date	FOCUS	S Report Line Item*	
Source of Net Capital (chec				
☐ Long Proprietary Positi		nterest/Dividends/Commission	s Secured Demand Note	
☐ Cash		Subordinated Loan	☐ Clearing / Good Fait Deposits	
☐ Other		_		
*Submitting the firm's most this section	•		ng the Net Capital is an alternative to completing	
SECURITIES				
Estimate the number of issu	ues in which the	Applicant intends to become re	egistered as a LMM:	
OTHER BUSINESS ACTIVITIE	ES			
Check all that apply:				
☐ Investment Banking			Public Securities Business	
☐ Proprietary Trading			Equities Market Maker	
☐ Other	.	_		

SECTION 2 - INFORMATION FOR LEAD MARKET MAKERS

LMMs are subject to all applicable State and Federal Laws, and the rules promulgated thereunder, as well as the Rules of NYSE Arca. To ensure compliance, please consult your compliance department and/or legal counsel to determine the rules that are applicable, including, but not limited to, those referenced below. In particular, you should determine whether Rule 6.82 applies to your firm, including reporting requirements.

NYSE Arca Rule 6.82(b): Qualification of Lead Market Makers

- (1) Qualification of LMMs. The qualification of LMMs shall be conducted by the Exchange. The LMM Qualification Process is as follows:
- (A) Applications for qualification as an LMM shall be general and shall not specify a particular option issue or issues. Applicants for qualification as an LMM may present any matter they wish the Exchange to consider in conjunction with its decision. The Exchange may require that presentation to be solely or partially in writing, and may require the submission of additional information from an applicant, OTP Holder or OTP Firm, or any person associated with an OTP Holder or OTP Firm.
- (B) The Exchange may also specify one or more conditions on the applicant in respect to any representations made in the application process, including but not limited to representations regarding capital operations, personnel or technical resources.

NYSE Arca Rule 6.82(c): Obligations of Lead Market Makers

Each LMM must meet the following obligations:

- (1) Assure that disseminated market quotations are accurate;
- (2) Honor guaranteed markets, including markets required by Rule 6.86 and any better markets pledged during the allocation process;
- (3) Generate and automatically update two-sided market quotations with size in all appointed series in accordance with Rule 6.37B (b) through the LMMs own proprietary autoquoting system;
- (4) Fulfill general Market Maker obligations under Rule 6.37 and 6.37A;
- (5) Be accessible throughout every business day. An LMM shall promptly notify a Trading Official if such LMM shall not be accessible at anytime during the day. The Exchange may designate an approved LMM to act as a back-up LMM in the event such appointed LMM is not accessible;
- (6) With respect to trading as a Market Maker, effect trades that have a high degree of correlation with the overall pattern of trading for each series in the option issues involved;
- (7) Reserved
- (8) Reserved
- (9) Promote the Exchange as a marketplace by assisting in meeting and educating market participants and taking the time for travel related thereto;
- (10) Maintain communications with member firms in order to respond to suggestions and complaints;
- (11) Respond to competition by offering competitive markets and competitively-priced services;
- (12) Maintain a cash or liquid asset position of at least \$1,000,000. In the event that two or more LMMs are associated with each other and deal for the same LMM account, this requirement will apply to such LMMs collectively, rather than to each LMM individually;
- (13) Fully satisfy conditions of appointments pursuant to Subsection (b)(1)(B) of this Rule;
- (14) Promptly inform the Exchange of any material change in financial or operational condition or in personnel.

SECTION 3 – REQUIRED INFORMATION & AKNOWLEDGEMENT

The undersigned, applying for registration as a Lead Market Maker, accepts full responsibility for having knowledge of and adhering to all applicable rules and regulations governing the trading facility of NYSE Arca, including its subsidiaries and affiliates. The undersigned acknowledges the following requirements:

- Maintain the net capital requirements as prescribed by NYSE Arca Rule 4 and SEC Rule 15c3-1, whichever is greater. The
 net capital requirements apply only to the registered Lead Market Maker firm rather than to each MMAT individually.
- Maintain a cash or liquid asset position of at least \$1,000,000. In the event that two or more LMMs are associated with each
 other and deal for the same LMM account, this requirement will apply to such LMMs collectively, rather than to each LMM
 individually.
- 3. The LMM's clearing firm will provide daily equity information to FINRA, acting as agent for NYSE Arca, for LMM cash or liquid asset position review.
- Provide monthly financial statements consisting of FOCUS Form X-17A-5 to FINRA, acting as agent for NYSE Arca, for Market Maker capital compliance review.
- 5. Provide detailed financial reports and such other operational reports to NYSE Arca or FINRA, acting as agent for NYSE Arca as may be required.
- 6. Disclose promptly any material change in financial or operational condition, or in personnel in accordance with the rules and procedures of NYSE Arca.
- 7. Establish, maintain, and enforce written procedures to supervise the business in which it engages and to supervise the activities of its associated persons that are reasonably designed to ensure compliance with applicable federal securities laws and regulations and NYSE Arca's rules. Such written procedures shall at all times be available for inspection by staff or agents of NYSE Arca.

AUTHORIZED ACKNOWLEDGEMENT OF THE CONTENTS HEREIN					
The undersigned attests that the contents submitted on behalf of the Applicant are complete and agrees to update information as required. Further, the Applicant will abide by all rules of the Exchange, as may be amended from time to time.					
Signature of Authorized Officer, Partner, Managing Member, or Sole Proprietor	Date				
Print Name of Authorized Officer, Partner, Managing Member, or Sole Proprietor	Title				
AUTHORIZED ACKNOWLEDGEMENT OF THE APPLICANT'S CL	EARING FIRM				
Signature of Authorized Clearing Firm Representative	Date				
Print Name	Title				
Clearing Firm Name	Clearing No.				

NYSE Arca Equities Retail Order Tier Form

Instructions: This form is to be completed by NYSE Arca ETP Holders who would like to participate in the Retail Order Tier.

A "Retail Order" is an agency order or a riskless principal order that meets the criteria of FINRA Rule 5320.03 that originates from a natural person and is submitted to the Exchange by an ETP Holder, provided that no change is made to the terms of the order with respect to price or side of market and the order does not originate from a trading algorithm or any other computerized methodology. The term "natural persons" refers to the origination of the order from a request made by a human as opposed to the generation of an order by a computer algorithm. An order from a "natural person" can include orders on behalf of accounts that are held in a corporate legal form, such as an Individual Retirement Account, Corporation, or a Limited Liability Corporation that has been established for the benefit of an individual or group of related family members, provided that the order is submitted by an individual.

Please note: If an NYSE Arca ETP Holder uses an algorithm to determine to send an existing Retail Order into the NYSE Arca Equities Retail Order Tier program, such order is eligible for the Retail Order Tier and is not deemed to have originated from a trading algorithm strictly as a result of the brokerage firm's algorithm, provided that the NYSE Arca ETP Holder assures that the Retail Order meets the underlying requirements, including that the routing algorithm does not change the terms of the order with respect to price or side of the market. Additionally, the Retail Order provision preventing changes to the terms of the order (e.g. price or side) is not meant to prevent an NYSE Arca ETP Holder from ensuring a better execution experience for the retail customer, such as by adding a limit to a Retail Order.

An NYSE Arca ETP Holder may submit Retail Orders in a riskless principal capacity, as well as an agency capacity, provided that the member (1) submits a report, contemporaneously with the execution of the facilitated order, identifying the trade as riskless principal to FINRA (or another self-regulatory organization if not required under FINRA rules); and (2) has written policies and procedures to ensure that riskless principal transactions for which the member is relying on this exception comply with applicable FINRA rules.

1. Customer Information

2. Business and Technology Questions					
As an NYSE Arca ETP Member Organization, do you currently have connectivity to the Exchange?					
Is this connection utilized for order routing, receiving market data or both? □ Order Routing □ Receiving Market Data □ Both					
If you are routing retail order flow on behalf of one or more broker-dealer customers, your firm will be required to execute a separate document with this firm or firms. We have a Broker Dealer Customer Form that we can provide for your convenience.					

June 2015

3. Retail Order Tier Supervisory Requirements

By executing this Application, the Applicant attests that substantially all orders submitted to NYSE Arca by the Applicant via Retail Order Ports or tagged as "Retail Orders" in the order entry message are Retail Orders and would meet the qualifications for such orders under the Retail Order Tier. An ETP Holder would be required to designate its Retail Order Ports, including adding new Retail Order Ports or removing existing Retail Order Ports that would no longer be used to submit Retail Orders, no later than the fifth trading day of the month in which the desired change is to become effective.

Applicant further attests that it has in place Written Supervisory Procedures (WSPs). Such WSPs require Applicant to:

(i) exercise due diligence before entering a Retail Order to assure that entry as a Retail Order is in compliance with the requirements specified by the Exchange, including that the Applicant maintain adequate substantiation that substantially all orders sent to the Exchange as Retail Orders meet the definition and that those orders not meeting the definition are agency orders that cannot be segregated from Retail Orders due to system limitations and are de minimis in terms of the overall number of Retail Orders submitted and (ii) monitor whether orders entered as Retail Orders meet the applicable requirements.

In addition, if Applicant represents Retail Orders from another broker-dealer customer, Applicant's WSPs must be reasonably designed to assure that the orders it receives from such broker-dealer customer that it designates as Retail Orders meet the definition of a Retail Order.

The Applicant must (i) obtain an annual written representation, in a form acceptable to the Exchange, from each broker-dealer customer that sends it orders to be designated as Retail Orders that entry of such orders as Retail Orders will be in compliance with the requirements specified by the Exchange; and (ii) monitor whether its broker-dealer customer's Retail Order flow meets the applicable requirements.

Name (Printed)	·	
Name (Signature)		
Title		
Date		

ATTACHMENT A

An ETP Holder is required to either designate certain of its order entry ports as "Retail Order Ports" and attest that substantially all orders submitted to the Exchange via such Retail Order Ports are Retail Orders or tag each order as a "Retail Order" in the order entry message. Additionally, an ETP Holder is required to designate its Retail Order Ports, including adding new Retail Order Ports or removing existing Retail Order Ports that would no longer be used to submit Retail Orders, no later than the fifth trading day of the month in which the desired change is to become effective.

If your firm would like to <u>create new</u> ports to be designated as "Retail Order Ports" please complete the **Customer Session**Request Form found here: https://www.nyse.com/publicdocs/nyse/markets/nyse/Client_Session_Request_Form.pdf and email this form to the Connectivity team at connectivity@nyse.com. Please Note: These new ports should be created prior to completing this form. Once you have established these new ports with the Connectivity team you may then submit this form stating which ports will be designated as "Retail Order Ports."

rovide a list below of all ports that will be used as Retail Order Ports. <i>Please Note</i> : These order entry ports must be esignated by the Firm as "Retail Order Ports".
ernatively, an ETP Holder may designate Retail Orders by entering the value "RET" in Fix Tag 50, or the ArcaDirect field nderSubID. Checking this box identifies the ETP Holder's intention to mark Retail Orders by FIX or ArcaDirect field. ET
Holder attests that all orders submitted to the Exchange identified as RET are Retail Orders.
NYSE Arca ETP Holder
Authorized Signatory of the Firm
Print Contact Name
Print Contact Name Title

Please return to Client Relationship Services at crs@nyse.com.

AP Form

NYSE Arca, Inc.

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- A copy of the completed Form must be retained by the Applicant and the member organization with which the Applicant is or will be associated ("Member Organization").
- To the extent necessary, provide additional information via a separate attachment referencing the section and question to which the additional information applies.
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 - The elimination of an existing Approved Person should be provided to the Exchange and FINRA in writing (email is acceptable)
 - Notification of changes should be provided to the Exchange (<u>crs@nyse.com</u>) and FINRA (<u>Q&RNY@finra.org</u>) within 30 days

For Applicants associated with firms <u>seeking</u> NYSE Arca membership, please email a signed and completed copy of the AP Form to Client Relationship Services at <u>crs@nyse.com</u>.

Sectio	n I
1.	Full Name of the Applicant:
2.	Full name and Web CRD # of the Member Organization with which the Applicant is or will be associated:
	Member Organization:
	Web CRD#:
3.	Approved Person Status is requested pursuant to the rules of the Exchange because the Applicant is not an ETP/OTP Holder, nor an employee or an Allied Person of a ETP/OTP Firm, and who: is a director of an ETP/OTP Firm controls an ETP/OTP Firm beneficially owns, directly or indirectly, 5% or more of the outstanding equity securities of an ETP/OTP Firm
4.	has contributed 5% or more of the partnership capital Is the applicant subject to a Statutory Disqualification – as the term is defined in Section 3(a)(39) of the Securities Exchange Act of 1934?
	 ☐ Yes ☐ No If an Applicant or any person associated with the Applicant, subsequently become subject to a Statutory Disqualification after initial approval, this information must promptly be communicated to the Exchange by sending notification to FINRA at Q&RNY@finra.org.

AP Form – June 2015

Se	ction II			
1.	Address of Applicant's principal place of business (complete address of actual location):			
2.	Date and place of incorporation or jurisdiction under the laws of which Applicant was formed:			
3.	Indicate whether the Applicant has operated under any other names and identify all such names:			
Se	ction III			
Ву	signing below, the Applicant represents and acknowledges the following:			
agr Org and App	Applicant is not relying upon the Exchange to provide any information concerning or relating to the Member Organization and ees that the Exchange has no responsibility to disclose to the Applicant any information concerning or relating to the Member anization that it may have now or obtain at any future time. The Applicant agrees for itself, its personal representatives, successors assigns that neither the Exchange, nor any investor, officer, trustee, agent, nor employee of said Exchange shall be liable to the olicant with respect to the Applicant's investment or interest in the Member Organization or with respect to any repayment of any such estment or interest.			
inv	understood that the statements made in connection with this Form will be relied upon by the Exchange and may be verified by estigation. The Applicant declares that all such statements are true, complete, current and accurate. It is also recognized that the change reserves the right to request additional information.			
The the 1.1	Applicant undertakes and agrees to subject itself to the jurisdiction of the Exchange and to abide by such provisions of the Rules of Exchange as would at any time apply to an "Approved Person" as such term is defined in Arca Rule 1.1(c) and Arca Equities Rule (d).			
dea exi am dea	The Applicant hereby agrees to comply with the relevant provisions of the Securities Exchange Act of 1934, as amended, and the Rules and Regulations thereunder, and to furnish said Exchange with such information with respect to the Applicant's relationship and dealings with its affiliated member organization as the Exchange may require, to supply the Exchange with information relating to the existence of any "statutory disqualification" (as such term is defined in Section 3(a)(39) of the Securities Exchange Act of 1934, as amended) to which the Applicant or any person associated therewith may be subject, to permit examination by the Exchange or its designee of Applicant's books and records in order to verify the accuracy of the aforesaid information, and to subject itself to and abide by the Exchange' disciplinary authority.			
ass	plicant represents that except as is specifically indicated on this form or any supplement thereto, neither it nor any person sociated therewith is subject to a statutory disqualification. (See Section 3(a)(39) of the Securities Exchange Act of 1934, as ended).			
full	olicant covenants and agrees that the foregoing statements, warranties, representations and undertakings will continue to apply with force and effect notwithstanding that the Member Organization may have changed its name or form of organization, or legal status that retained its same SEC Broker Dealer number) unless Applicant shall have otherwise notified the Exchange, in writing.			
Sic	nature: Date:			
	(A Duly Authorized Executive Officer, Senior Partner, Managing Member or equivalent of the Applicant)			
.				
۲ń	nted Name:			
Titl	e:			

NYSE Arca Equities, Inc.

Application to Become a Lead Market Maker* In a Particular NYSE Arca Primary Listed Security

*Must be an existing Lead Market Maker ETP in order to submit this application

LIST OF SECURITI	<u>ES FOR LMM REGISTRA</u>	TION		
Trading Permit ("LETF In addition to the inform (e.g., trading firm's back	") holder that seeks to apply mation requested below, any ckground), may submit such	to become a Lead Market Make LMM applicant that wishes to pro-	ted only by a registered Lead Market Maker or in a particular NYSE Arca Equities listed s ovide additional information to the listed cor Note that any written information may be su	ecurity. mpany
Date:	SEC #:	CRD#:	MPID: (If NASDAQ Particip	ant)
Name of Applicant LE	TP:		(111/102) (2.101/102)	_
Business Contact:		Busines	ss Phone:	
Business Email:				
Solicitations for LMM a should be sent to this	Applications in individual sect Email address:	urities		
Name, telephone num	ber, and email address of the	e contact that will serve as the L	ead Market Maker Designee:	
Name:	Phone):	Email:	
	e will serve as the main conta		ation and may, but need not, be registered a present at any interviews with a listing com	
LMM applicants are re	equired to ensure the followin	g information on file with the Ex	change is accurate and up to date:	
□ Organizational Pr	ofile			
□ Other SRO affiliat	tions of the Applicant			
□ A list of registered	d MMATs, including NYSE Ar	ca requirements regarding the f	Market Maker Orientation Program for each	
□ Supervisory proce	edures of the Applicant relatir	ng to Market Making		
Officer, Partner, Man		Proprietor of the Applicant. I	ch item should be initialed by an authoriz f any of the below items results in a "Yes	
Has the physical make disclosure to the Corp		es or actual location of the MMA	T(s) for the Applicant changed since previou	
			re applying to become the LMM*: they are designated as LMM, pursuant to NYSE	Arca
Security Name:			Symbol:	
Designated Market Ma	aker Authorized Trader(s) for	this security:		
Name:			CRD #:	
Name:			CRD #:	
Name: CRD #:				
For future additions or	changes to your list of secur	rities, you will be required to sub	mit additional copies of Sections 7 & 8.	

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Name of Company	Description and Date of Contact		
·			

INFORMATION FOR LEAD MARKET MAKER

LMMs are subject to NYSE Arca Equities rules. To ensure compliance, please consult your compliance department and/or legal counsel to determine the rules that are applicable, including the rules referenced below.

NYSE Arca Equities Rule 7.22: Registration of Market Makers in a Security

(d) Designated Market Makers and Lead Market Makers shall be selected by the Corporation. Such selection shall be based on, but is not limited to, the following: experience with making markets in equities; adequacy of capital; willingness to promote the Exchange as a marketplace; issuer preference; operational capacity; support personnel; and history of adherence to Exchange rules and securities laws.

NYSE Arca Equities Rule 7.24: Designated Market Maker Performance Standards

- (a) Designated Market Makers will be required to maintain minimum performance standards the levels of which may be determined from time to time by the Corporation. Such levels will vary depending on the price, liquidity, and volatility of the security in which the Designated Market Maker is registered. The performance measurements will include (i) percent of time at the NBBO; (ii) percent of executions better than the NBBO; (iii) average displayed size; (iv) average quoted spread; and (v) in the event the security is a derivative security, the ability of the Designated Market Maker to transact in underlying markets.
- (b) Designated Market Makers that are **Lead Market Makers** will be held to higher performance standards in the securities in which they are registered as **Lead Market Makers** than Designated Market Makers that are not **Lead Market Makers**.

NYSE Arca Equities Rule 8.201(g): Commodity-Based Trust Shares; Market Maker Accounts

Market Maker Accounts. An ETP Holder acting as a registered Market Maker in Commodity-Based Trust Shares must file with the Exchange in a manner prescribed by the Exchange and keep current a list identifying all accounts for trading in an underlying commodity, related commodity futures or options on commodity futures, or any other related commodity derivatives, which the Market Maker may have or over which it may exercise investment discretion. No Market Maker shall trade in an underlying commodity, related commodity futures or options on commodity futures, or any other related commodity derivatives, in an account in which a Market Maker, directly or indirectly, controls trading activities, or has a direct interest in the profits or losses thereof, which has not been reported to the Exchange as required by this Rule.

In addition to the existing obligations under Exchange rules regarding the production of books and records, the ETP Holder acting as a Market Maker in Commodity-Based Trust Shares shall make available to the Exchange such books, records or other information pertaining to transactions by such entity or registered or non-registered employee affiliated with such entity for its or their own accounts for trading the underlying physical commodity, related commodity futures or options on commodity futures, or any other related commodity derivatives, as may be requested by the Exchange

AUTHORIZED ACKNOWLEDGEMENT OF THE CONTENTS HEREIN		
The undersigned attests that the contents submitted on behalf or required. Further, the Applicant will abide by all rules of the Exc	of the Applicant are complete and agrees to update information as change, as may be amended from time to time.	
Signature of Authorized Officer, Partner, Managing Member, or Sole Proprietor	Date	
Print Name	Title	

NYSE Arca Equities, Inc.

Application for Market Maker* Registration

*Includes Market Maker & Lead Market Maker

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Application for Market Maker (Sections 1-6)	5-10

Application Process

Filing Requirements

Prior to submitting the <u>Application to become a Market Maker</u>, an applicant Broker-Dealer must have completed the Equity Trading Permit ("ETP") application. A firm will not be eligible for approval as a Market Maker until after their ETP application is approved.

Checklist

Applicant ETP must complete and submit all materials as required in this Application Checklist (page 4) to crs@nyse.com.

If you have questions regarding the application, you may direct them to NYSE Arca Client Relationship Services: Email: crs@nyse.com; Phone: (212) 896-2830, option 5.

Application Process

- Following submission of the <u>Application for Market Maker Registration</u> and supporting documents, NYSE Arca will review the
 application for completeness, assess the firm's capital sufficiency, review registration and disclosure information for the Applicant
 and each listed Market Maker Authorized Trader, and review the Applicant's written supervisory procedures.
- Applicant ETP Broker-Dealers must designate within Section 1 whether they are applying as a Market Maker ETP ("METP"), and/or as a Lead Market Maker ETP ("LETP").
- Applicant Broker Dealer is required to consult with an NYSE Arca Sales Representative to determine the most beneficial
 connectivity option. NYSE Arca will then coordinate the connectivity between the Applicant Broker Dealer and the Exchange. For
 Lead Market Maker applicants, the Exchange will assess the Applicant's trading systems by using the NYSE Arca LMM
 Certification Test.
- If review of Statutory Disqualification Disclosure information and/or a background investigation indicates that the applicant Broker-Dealer has an associated person(s) with a possible statutory disqualification, NYSE Arca will contact the representative of the applicant Broker-Dealer to discuss the statutory disqualification process.
- If it appears that the applicant Broker-Dealer has outstanding debt, civil judgment actions and/or regulatory disciplinary actions, the applicant Broker-Dealer will be contacted by NYSE Arca for further information.
- Applicants who have completed and returned all documents without indication of a statutory disqualification, outstanding debt, civil judgment actions and/or regulatory disciplinary actions will be presented to NYSE Arca for approval or disapproval without delay.
- NYSE Arca will promptly notify the applicant Broker-Dealer in writing of their decision.
- Upon approval and once connectivity is established, your NYSE Arca Sales Representative will inform you of your ability to trade.
- In the event an applicant Broker-Dealer is disapproved by NYSE Arca, the applicant Broker-Dealer has an opportunity to be heard upon the specific grounds for the disapproval, in accordance with the provisions of NYSE Arca Equities Rule 10.13. A disapproved applicant desiring an opportunity to be heard shall file a written application with the Secretary of the Corporation within thirty (30) calendar days after such action has been taken.

Approved Lead Market Maker ETP Firms:

Approved LETP firms will receive all Green Sheet postings via e-mail and may apply to become the LMM in a particular security with NYSE Arca as its primary listing venue by completing the LMM Registration Application. Eligible LETP firms may be selected as the LMM for a particular security based on input by the listing company, or may be selected randomly from a list of LETPs who have submitted their LMM application for that security. LMM selection based on input by the listing company will require interviews between the LMM applicant(s) and the listing company.

APPLICATION CHECKLIST & FEES - NEW NYSE ARCA MARKET MAKER APPLICANTS

- □ Approved Equity Trading Permit ("ETP") application
- Application for Market Maker Registration, Sections 1 through 6
- Form U4 and fingerprint cards for each Market Maker Authorized Trader listed in Section 3 are available on Web CRD®
- Proof of Passing Series 7 (prior to May 1, 2016) or Series 57 (Effective May 1, 2016) Test Score for each Market Maker Authorized Trader listed in Section 3; or
- Request for a Series 57 Waiver has been requested via WebCRD been granted by NYSE Arca.
- ☐ Market Maker Orientation Acknowledgement https://www.nyse.com/publicdocs/nyse/markets/liquidity-programs/arca mm_orientation.pdf
- □ Copy of Applicant's Written Supervisory Procedures ("WSPs") for Market Making on NYSE Arca, LLC
- Financial Documentation
 - Four (4) Most Recent FOCUS Reports¹ and Most Recent Audited Financial Statements, if applicable
 - Most Recent Balance Sheet and Capital Computation
 - Six Month Profit/Loss Projection
 - Subordination Agreements, if applicable
- ☐ All examination reports and corresponding responses from the Applicant Broker-Dealer for the previous two (2) years
- Organizational Documents: Articles of Incorporation and Bylaws; Partnership Agreement; Limited Liability Company ("LLC")
 Agreements; Operating Agreement; or similar documentation
- □ Copy of Written Supervisory Procedures, Anti-Money Laundering Procedures, and Insider Trading Act Procedures (if separate)

ADDITIONAL CHECKLIST FOR BROKER-DEALERS REQUESTING TO BECOME A LEAD MARKET MAKER ETP ON NYSE ARCA

- Application for Market Maker Registration (if not completed concurrently with Market Maker application):
 - Section 1 to identify intent to apply as a Lead Market Maker ETP
 - Sections 3 & 4 for any previously undisclosed Market Maker Authorized Traders
 - Section 6
- NYSE Arca LMM Certification Test
 - Approved Lead Market Makers must confirm in writing that they have tested and are able to maintain continuous two-sided quotes.

¹ Applicants must demonstrate that they have current net capital of 140% of their minimum net capital requirement or \$20,000 in excess of their minimum dollar net capital requirement, whichever is greater. If the Broker-Dealer has reported net losses for the period reviewed, the Firm's financial statements must demonstrate that its excess net capital can withstand six (6) consecutive months of average losses. Applicant Broker-Dealers that do not have the requested financial information available are required to submit Pro Forma Financial statements for the most recent six (6) months or since inception, whichever is less.

EXPLANATION OF TERMS & PROCESSES

For purposes of this application, the following terms shall have the following meanings:

Applicant Broker-Dealer – the Broker-Dealer applying as a registered Market Maker or amending this form to become a registered Market Maker.

Associated Person - a person who is a partner, officer, director, member of a LLC, trustee of a Business Trust, or employee of an ETP Holder or any person directly or indirectly controlling, controlled by or under common control with an ETP Holder.

Control – (as defined on Form-BD) the power, directly or indirectly, to direct the management or policies of a company, whether through ownership of securities, by contract or otherwise. Any person that (1) is a director, general partner or officer exercising executive responsibility (or having similar status or functions); (2) directly or indirectly has the right to vote 25% or more of a class of a voting security or has the power to sell or direct the sale of 25% or more of a class of voting securities; or (3) in the case of a partnership, has the right to receive upon dissolution, or has contributed, 25% or more of the capital, is presumed to control that company.

Central Registration Depository System (Web CRD®) – A centralized electronic registration system maintained by FINRA which provides information on registered representatives and principals for members of participant organizations. This database contains employment history, exam scores, licensing information, disciplinary actions, fingerprint results, and other related registration information. NYSE Arca, Inc. is a participant of this system.

Designated Examining Authority (DEA) – the SEC will designate one Self-Regulatory Organization ("SRO") to be a Broker-Dealer's examining authority, when the Broker-Dealer is a Member or ETP Holder of more than one SRO. Every Broker-Dealer is assigned a DEA, who will examine the Broker-Dealer for compliance with financial responsibility rules. The SEC will make the DEA assignment based on the SRO examination program and the Broker-Dealer's primary business location.

Designated Market Maker ("DMM") - a registered Market Maker that participates in the Directed Order Process

Direct Owners/Executive Officers – refers to (1) a director, general partner or officer exercising executive responsibility (or having similar status or function); or (2) directly or indirectly has the right to vote 5% or more of a class of voting security or has the power to sell or direct the sale of 5% or more of a class of voting securities; (3) is entitled to receive 5% or more of the net profits; (4) in the case of a partnership, all general partners and those limited and special partners that have the right to receive upon dissolution or have contributed, 5% or more of the capital; or (5) in the case of a LLC, those members that have the right to receive upon dissolution, or have contributed, 5% or more of the LLC's capital, and if managed by elected managers, all elected managers.

Financial Arrangement – (1) the direct financing of an ETP Holder's dealings upon the Exchange; (2) any direct equity investment or profit sharing arrangement; or (3) any consideration over the amount of \$5,000.00 including, but not limited to, gifts, loans, annual salaries or bonuses.

Lead Market Maker ("LMM") – a registered Market Maker that is the exclusive DMM in listings for which the Corporation is the primary market

Lead Market Maker ETP ("LETP") - an approved Market Maker with NYSE Arca, Inc. eligible to apply as an LMM

Market Maker - an ETP Holder approved by the Corporation to act as a Market Maker pursuant to NYSE Arca Equities Rule 7.20

Market Maker Authorized Trader ("MMAT") – an authorized trader who performs market-making activities pursuant to NYSE Arca Equities Rule 7.21, on behalf of a Market Maker.

NYSE Arca, Inc. ("NYSE Arca" or the "Corporation") – a Delaware corporation as described in the Corporation's Certificate of Incorporation and Bylaws. NYSE Arca is a national securities exchange as that term is defined by Section 6 of the Securities Exchange Act of 1934, as amended. NYSE Arca, Inc. is the Self-Regulatory Organization for NYSE Arca, LLC

NYSE Arca, LLC - The equities marketplace and a trading facility of NYSE Arca, Inc.

NYSE Arca Equities - NYSE Arca Equities, Inc. (a wholly owned subsidiary of the NYSE Arca, Inc.).

Self-Regulatory Organization (SRO) - each exchange or national securities association is an SRO. Each SRO must have rules that provide for the expulsion, suspension and other discipline of member Broker-Dealers for conduct inconsistent with just and equitable principles of trade.

Symbols – refers to stock symbols that may be assigned to a MMAT. Symbols are assigned at the firm level and are traded by the MMATs. Symbols may be added or removed on a daily basis, based on requests emailed to Exchange Security Operations, operationsclearing@nyx.com, with said request. At this time, OTC symbols are not eligible for market making. Upon approval, by default, two test symbols (ZVV and M.TEST) will be assigned to the firm for testing purposed

SECTION 1 – ORGANIZATIONAL PROFILE				
Date: Si	EC #:	CRD#:	MPID (If NASDAQ Participant)	
☐ Application ☐	Amendment			
THE APPLICANT INTENDS TO R	REGISTER AS A(N) (Cho	eck all that apply):		
☐ Market Maker (METP)	☐Lead Mari	ket Maker (LETP)		
GENERAL INFORMATION				
Name of Applicant ETP:				
Business Address:		_		
City:		State:	Zip Code:	
		_		
Contact Name:				
Phone:				
Email:			_	
ETP APPROVAL STATUS				- Wande
	currently an approved F	Fauity Trading Permit	Holder with NYSE Arca Equities*	
* All Market Maker Applic				
NET CAPITAL				
Amount:	As of Date:	Focus	Report Line Item*:	
*Submitting the firm's most recent Quarterly FOCUS report and highlighting the Net Capital is an alternative to completing this section.				
Source of Net Capital (check all	l that apply):			
☐ Long Proprietary Positions	☐ Interest/Dividend:	s/Commissions	Secured Demand Note	☐ Cash
☐ Subordinated Loan	☐ Clearing/Good Fa	aith Deposits	☐ Other	
SECURITIES				
List the number of securities for which your firm requests approval:				
OTHER BUSINESS ACTIVITIES				
Check all that apply:				
☐ Investment Banking	☐ Public Securities	Business	☐ Proprietary Trading	
☐ Options Market Maker	Other		<u></u>	

SECTION 2 – OTHER AFFILIATIONS				
Is the Applicant a dealer/specialist or Market Maker on a registered national securities exchange(s) or association? If yes, please provide the relevant information below.				
☐ Yes ☐ No				
Applicants who currently act as pursuant to NYSE Rules 36 an	s a Specialist on the New York Stock Exchange, LLC ("NYSE") are reminded of their requirements and 98.			
SRO:				
Operating Capacity:	Operating Capacity:			
List Securities				
SRO:				
Operating Capacity:				
List Securities				
List Securities				
SRO:				
Operating Capacity:				
List Securities				

SECTION 3 - MARKET MAKER AUTHORIZED TRADER APPLICANT LIST Ensure a Form U4 for each of the individuals identified below is available on Web CRD®. To be eligible for registration as a MMAT, as defined in NYSE Arca Equities Rule 1.1(v), a person must (i) have successfully completed the General Securities Representative Examination (Series 7) prior to May 1, 2016 or successfully complete the Securities Trader Qualification Examination (Series 57) effective May 1, 2016, (ii) complete the NYSE Arca Equities sponsored training and orientation program, and (iii) register each individual on Web CRD® in the appropriate NYSE Arca registration category (MT). NYSE Arca Equities sponsored training and orientation program is available at: https://www.nyse.com/publicdocs/nyse/markets/liquidity-programs/arca mm orientation.pdf LEAD MARKET MAKER DESIGNEE (Required for Lead Market Maker ETP Applicants Only) Full Name: Date of Birth: Street Address: Suite/Floor: _____ Zip Code: City: _____State: Phone Number: Fax Number: E-Mail Address: Will this individual be registered as a Market Maker Authorized Trader: Yes (Please complete the information below) CRD#: Qualifying Exam: ☐ Yes ☐ No NYSE Arca Orientation: Yes No

SRO Affiliation:

Form U4, Proof of Series 7/Series 57, and Fingerprint Card Information is current and accessible for this person on WebCRD®

☐ Yes ☐ No

Employer CRD #:

Form U4, Proof of Series 7/Series 57, and Fingerprint Card Information is current and accessible for this person on WebCRD®

NYSE Arca Orientation: ☐ Yes ☐ No

NYSE Arca Orientation: Yes No

Employer Broker-Dealer: _____ Operating Capacity: _____

_ ____ Date of Birth:

_____ Date of Birth:

Form U4, Proof of Series 7/Series 57, and Fingerprint Card Information is current and accessible for this person on WebCRD® PLEASE USE MULTIPLE COPIES OF THIS FORM TO LIST ADDITIONAL MARKET MAKER AUTHORIZED TRADERS

☐ Yes ☐ No

Employer CRD #:

Employment Dates:

Employer Broker-Dealer:

Employer Broker-Dealer: ____

Full Name:

Full Name:

MARKET MAKER AUTHORIZED TRADER

CRD #: __ Qualifying Exam:

MARKET MAKER AUTHORIZED TRADER

Qualifying Exam:

SECTION 4 - MARKET MAKER ORIENTATION ACKNO	WLEDGEMENT
the entire Market Maker Orientation program offered on the NYS	thin this application or subsequently added in the future will review SE Arca website: 1.html. Complete review of the Market Maker Orientation program
The Applicant Broker-Dealer also acknowledges that failure by a NYSE Arca, LLC may result in disciplinary action against the Br	any MMAT to complete the orientation program prior to trading on oker-Dealer and the MMAT.
Applicant Broker-Dealer	
Signature of Authorized Officer, Partner, Managing Member, or Sole Proprietor	Date
Print Name	Title

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SECTION 5 - DESIGNEE ASSIGNMENT			
A "Designee" is a person assigned by the firm who is authorized to add and remove an MMAT's registered symbols. Typically, the Designee refers to any person that is a partner, director, or officer exercising executive responsibility (or having similar status or functions) for supervising MMATs (as defined in NYSE Arca Equities Rule 1.1(v)). This section allows a Designee to assign the Designee function authority to other members of the firm. By default, Head Traders fall under this category; however, such persons are required to be designated below.			
DESIGNEE			
Full Name:	_		
Title:	-		
Email Address:	Phone Number:		
DESIGNEE			
Full Name:	_		
Title:	_		
Email Address:	Phone Number:		
DESIGNEE			
Full Name:	_		
Title:	_		
Email Address:	Phone Number:		
DESIGNEE			
Full Name:	_		
Title:	_		
Email Address:	Phone Number:		
AUTHORIZED ACKNOWLEDGEMENT			
Circulation of Authorized Office De de Marie	Data		
Signature of Authorized Officer, Partner, Managing Member, or Sole Proprietor	Date		
Print Name	Title		

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	6 - REQUIRED INFORMATION & ACKNOWLEDGEMENT		
The undersigned, applying for registration as a Market Maker*, accepts full responsibility for having knowledge of and adhering to all rules and regulations governing the equities trading facility of NYSE Arca Equities called NYSE Arca LLC. The undersigned acknowledges the following requirements:			
1.	Minimum Net Capital Requirements Note: the requirements in items 1(a) and (b) apply only to the registered Market Maker rather than to each MMAT individually.		
	(a) Market Makers Subject to the Aggregate Indebtedness Requirement Maintain minimum net capital that is the greater of: (i) \$100,000; (ii) \$2,500 for each security that it is registered as a Market Maker (unless a security in which it makes a market has a market value of \$5 or less, in which event the amount of net capital shall be not less than \$1,000 for each such security) based on the average number of securities that such Market Maker is registered during the 30 days immediately preceding the computation date; (iii) 6 2/3 percent of aggregate indebtedness; or (iv) the amount prescribed by SEC Rule 15c3-1.		
	(b) Market Makers Subject to the Alternative Net Capital Requirement Maintain minimum net capital that is the greater of (i) \$250,000; (ii) 2 percent of aggregate indebtedness; or (iii) the amount prescribed by SEC Rule 15c3-1.		
2.	Provide monthly financial statements consisting of FOCUS Form X-17A-5 to FINRA's Risk Oversight & Oper. Reg department for Market Maker capital compliance review.		
3.	Provide detailed financial reports and such other operational reports to FINRA's Risk Oversight & Oper. Reg department as it may require.		
4.	Disclose promptly any material change in financial or operational condition, or in personnel in accordance with the rules and procedures of NYSE Arca Equities.		
5.	Establish, maintain, and enforce written procedures to supervise the business in which it engages and to supervise the activities of its associated persons that are reasonably designed to ensure compliance with applicable federal securities laws and regulations and NYSE Arca Equities' rules. Such written procedures shall at all times be available for inspection by NYSE Arca Equities staff.		
	arket Maker and/or Lead Market Maker		
	ZED ACKNOWLEDGEMENT OF THE CONTENTS HEREIN		
The unders required. F	igned attests that the contents submitted on behalf of the Applicant are complete and agrees to update information as urther, the Applicant will abide by all rules of the Exchange, as may be amended from time to time.		
	re of Authorized Officer, Partner, Managing Date r, or Sole Proprietor		
Print Na	arne Title		

OTP HOLDER REQUEST FOR OFF-FLOOR TRANSFER OF POSITIONS

OTP Holder	CRD#
Pursuant to NYSE Arca Rule 6.78(o	d), the OTP Holder identified above intends to transfer certain securities of another account in a manner other than trading on the floor of a national er hereby requests the NYSE Arca approval to transfer securities positions of
Proposed Transfer Date:	
Briefly explain the purpose of this Position Transfer:	
Option or Stock Symbols of the positions to be transferred:	
The accounts and OTP Holders own	ing and controlling the accounts involved in this position transfer include:
Positions will be transferred From Account #	
Owned/Controlled by: (Name of OTP Holder)	
Positions will be transferred To Account #	
Owned/Controlled by: (Name of OTP Holder)	
The net effect on open interest as a	result of this transfer in securities positions will be:
☐ No effect on open interest	Approximately % effect on open interest
If all ownership and control of the tregistered OTP Holder or OTP Firm,	transferred positions will be relinquished to a person or entity that is <u>not</u> a this form may not be used.
The undersigned hereby represents	that the information contained herein is true, correct and complete.
Print Name of Authorized Person	Title
Signature	Date
Submit scan and return this form (to: - Client Relationship services at crs@nyse.com

NYSE Arca Options - Designated Give-up Notification Form

OTP Firm Name				CRD#		
Business Contact Name		•		1		
Business Contact Phone and E-mail Address						
2. Give-up Informat	tion			::		
ups for the following	g Clearir eck the a	ng Members	E Arca Options to enable (Give Up	Disable Give Up
Clearing Member Name:			OCC #:			
Clearing Member Name:			OCC #:			
Clearing Member Name:			OCC #:			
Clearing Member Name:			OCC #:			
Clearing Member Name:	_		OCC #:			
Clearing Member Name:			OCC #:			
Clearing Member Name:			OCC#:			
Clearing Member Name:			OCC#:			
ransactions execute	nts that	ant to this agreemen	licies and procedures app t and NYSE Arca Rule 6.1 g Letter of Consent or Let	15.		
Print Name and Title Authorized Signator						
Signature			Da	ite		

Please return to Client Relationship Services via email CRS@nyse.com.

NYSE Arca Options

TERMINATION OF FLOOR BROKER

То:	NYSE Arca Client Relationship Services Department				
From:					
	OTP Member Firm				
Re:					
	Floor Broker Name	Acronym(s)			
Date of	termination:	(Close of Business)			
☐ Tem	porary Termination (1-120 days)				
	– Date of Return:				
☐ Pern	nanent Termination				
	Authorized Signature of OTP Firm	Date			

Checklist for Terminating an OTP Floor Broker

- 1. OTP holders must notify the Exchange in advance of the proposed termination date.
- 2. Temporary terminations cannot exceed 180 days.
- 3. OTP holders must return floor badges and handhelds to floor staff.
- 4. In conjunction with a permanent termination, a Form U-5 for the "FB" registration category should be submitted on WebCRD® promptly but no later than 30 calendar days after the date of termination.
- 5. Individuals who wish to remain registered in the Interim Member Floor Broker Program should not submit this form or the Form U-5. *For more information about the Interim Member Floor Broker Program, please contact Client Relationship Services via email at crs@nyse.com.

Enrollment Form for ETF Liquidity Provider Program (ELP) on NYSE Arca

Equity Trading Permit ("ETP") Holders of NYSE Arca Equities, Inc. ("NYSE Arca") are eligible to participate in the ETF Liquidity Provider Program (ELP) in less-active ETFs listed on NYSE Arca by completing this enrollment form. ETP Holders are required to select a designated Equity Trading Permit ID ("ETPID") on UGW and/or Market Participant ID (MPID) on NGW to track enrollment requirements. Capitalized terms used in this enrollment form (but not defined here) are defined in the NYSE Master User Agreement. **General Information** Firm Name: **Business Address:** City: _____ State: ____ Zip: Business Phone: MPID: **ELP Firm Performance Report** As an ELP participant, the above firm will receive a daily report of their performance in the ELP eligible symbols. Please indicate an email address below for report receipt: Email: **Authorization and Acceptance** The ETP Holder, by its duly authorized officer identified below, certifies the information on this form is accurate. ETP Holders are required to update promptly any information on the form if it becomes inaccurate. By signing this form, the ETP Holder agrees that NYSE Arca can publicly identify the enrollee as a liquidity provider in the ELP program and provide the enrollee's name and its quoting performance in the security(ies) in which it has qualified as a liquidity provider under the ELP program to the issuer of the security(ies). The ETP Holder acknowledges that completion of this form by itself will not result in any credits and that credits will be determined solely by NYSE Arca in accordance with the requirements of the Rules of NYSE Arca. Signature of Authorized Officer: Name: Title: Phone: **Email Address:** Date:

Completed application and revisions should be returned via email to crs@nyse.com.